Harvard Business Review

July–August
2023

Gen AI and the New Age of Human Creativity

How revolutionary
technology can
enhance, rather than
replace, our powers
of imagination

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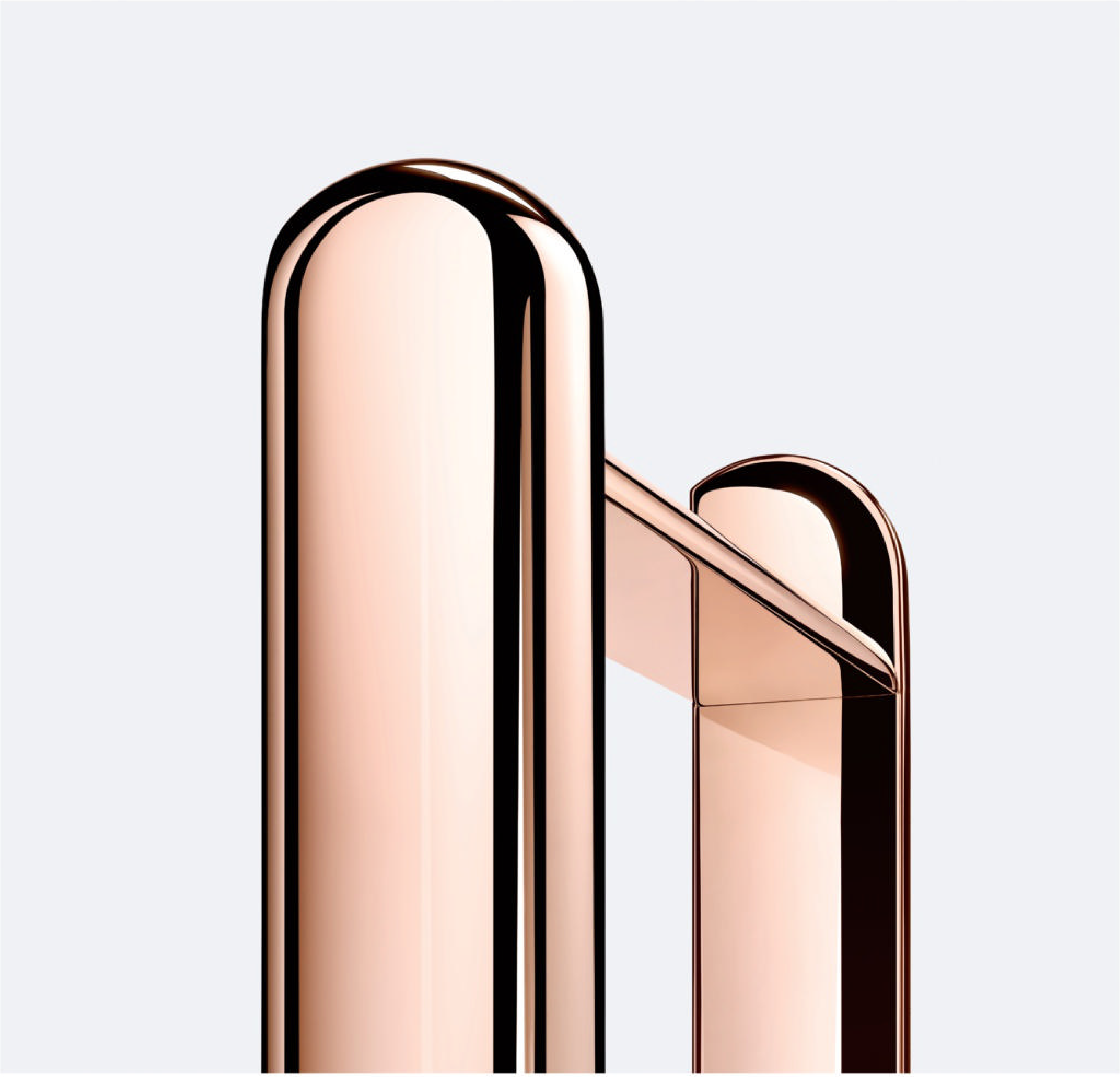

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> “Cutting costs with the singular goal of realizing short-term savings is myopic.”
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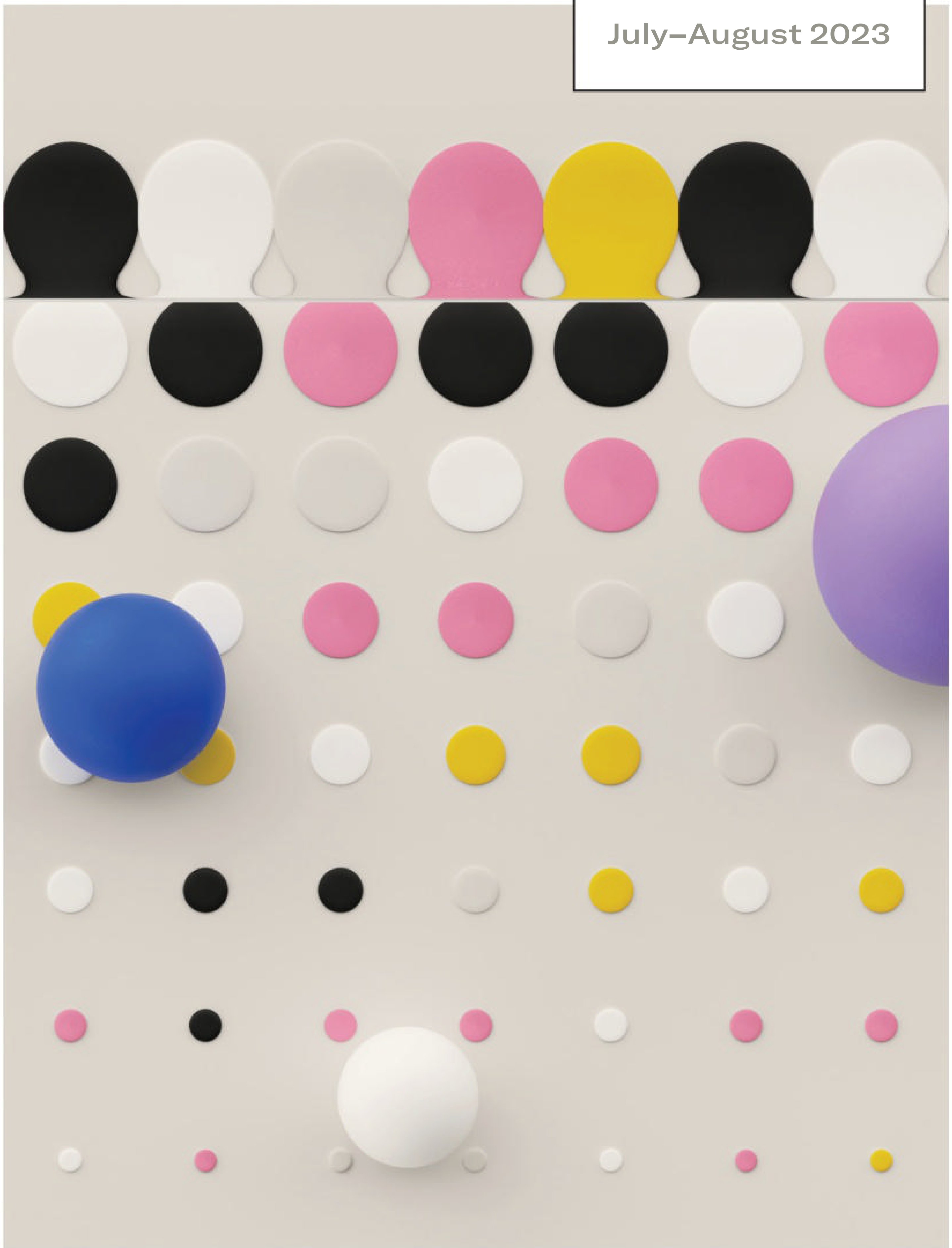

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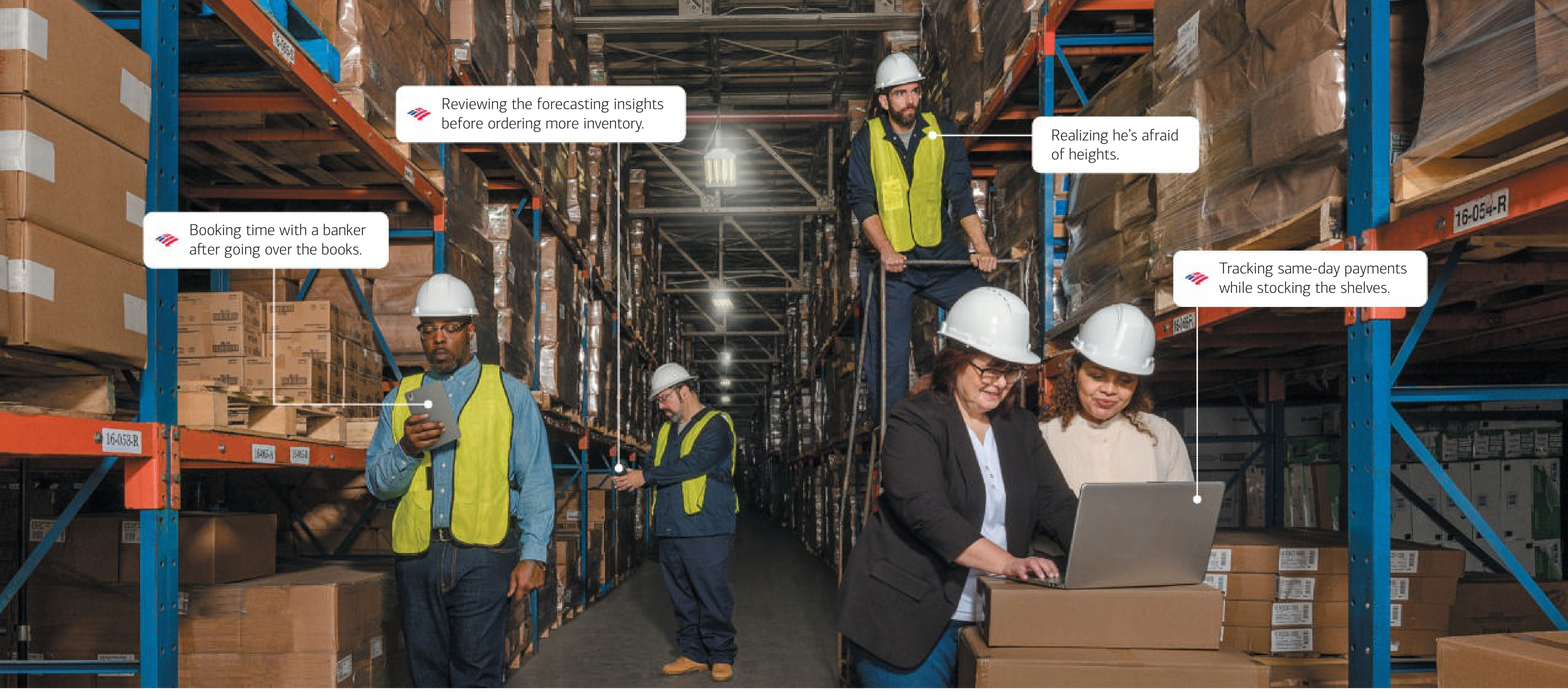
Photograph by GIANFRANCO TRIPODO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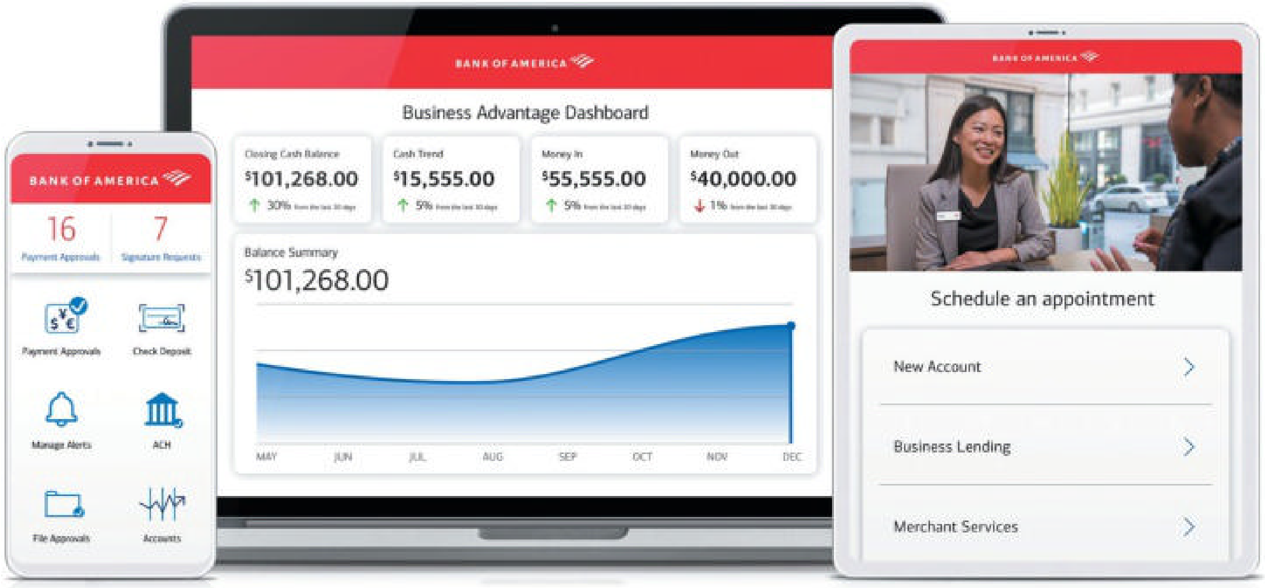
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I Wrote This Myself (Really)

Adi Ignatius

WHEN CHATGPT and other publicly accessible generative-AI platforms first emerged, late last year, many of us couldn't wait to try out the technology. First we played with it, using prompts like "Write a Beatles song in HBR style." Then we tried to "break" it, asking questions such as "Can you fall in love like humans?" And now we're settling down to figure out how to actually use it—a process, I suspect, that you and your companies are engaged in too.

In "How Generative AI Can Augment Human Creativity," featured on this issue's cover, Tojin T. Eapen and his coauthors draw on their experience advising organizations on the use of generative AI to improve innovation efforts. "This technology can help organizations...augment the creativity of employees and customers and help them generate and identify novel ideas—and improve the quality of raw ideas," they write. Although many of us have experimented with text-driven generative-AI platforms, the authors also relied on AI that creates images. In one example they used a tool to generate 20 concepts for chairs that incorporate the shapes of butterflies and elephants—which it did in seconds.

The opportunities and risks of this new technology are just starting to take shape. But it seems safe to say that many of our jobs will change as we learn to apply these tools. If we're lucky, generative AI will—like calculators and the internet before it—help us all discover entirely new ways to unlock value. It will be an interesting journey.

Thanks for reading.

ADI IGNATIUS
Editor in chief

Robyn Twomey

Contributors

Ranjay Gulati has always been fascinated by how his favorite sports teams—the Boston Celtics, the New England Patriots, the Seattle Seahawks, and the University of Alabama Crimson Tide—find ways to thrive in the face of adversity. This interest led Gulati, a professor at Harvard Business School, to study how "resilient" organizations achieve growth and profitability in both good times and bad. In his article in this issue he explores what drives these companies—a topic that bridges strategy, organizational design, and leadership.

36 Investing in Growth Through Uncertainty

Luisa Alemany left school at 13 to become a factory apprentice. She later returned and eventually earned an MBA at Stanford University. Today she teaches and studies entrepreneurial finance at London Business School. Her interest in disabled people was sparked by teaching university graduates with disabilities. "I was worried that some students could not see my slides or hear me," she says. "But they were completely engaged. They had other abilities that made them shine." In this issue she and her coauthor describe how companies are utilizing this source of talent.

106 Disability as a Source of Competitive Advantage

In 2009 **Adam Bryant** pitched an unusual idea for a CEO interview series to the *New York Times*: What if he never asked about strategies or industries but focused on leadership lessons? That led to "Corner Office," a weekly feature for which he conducted more than 500 interviews. Since leaving the *Times,* in 2017, to join the ExCo Group, an executive mentoring and leadership development firm, Bryant has interviewed hundreds more executives for a series on LinkedIn. Those conversations informed his book *The Leap to Leader* (Harvard Business Review Press, 2023), from which his article in this issue is adapted.

96 The Leap to Leader

In his early years as an innovation consultant, **Tojin Eapen** observed that "experts often struggled to produce and accept new ideas, while nonexperts who could generate novel ideas lacked the knowledge and resources to make them viable." More than a decade later he recognized a potential remedy: generative AI tools such as ChatGPT. He tested them on an R&D team at a major U.S. consumer products company. "The tools helped ideators generate more original ideas and better specify and visualize them," he says. In this issue Eapen and his coauthors share how other companies can benefit from generative AI.

56 How Generative AI Can Augment Human Creativity

Justyna Stasik is a Polish-born illustrator who lives in Montreal and creates work for Apple, the *New York Times,* and Adobe, among others. Often described as fun, expressive, and simplistic, her work is filled with approachable characters, lively patterns, and bold colors. For the article she illustrated in this issue she reflected on the complexity of managing and storing personal data. "To keep things light," she says, "I used a bright, upbeat color palette. The aim is to show how difficult it is to make managing people's data right and safe, despite all the effort we put into it."

86 The Ethics of Managing People's Data

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SUMMER SPECIAL ISSUE

Feel like you're faking it?

We all experience this kind of anxiety at times—in a new role, for example, or in situations where we don't think we fit in. That feeling can become overwhelming for ambitious leaders, leading to debilitating stress as well as toxic behaviors that undermine their goals.

In this issue we've collected the most relevant articles HBR has published on how you can develop your confidence as a leader—in a way that is authentic to you.

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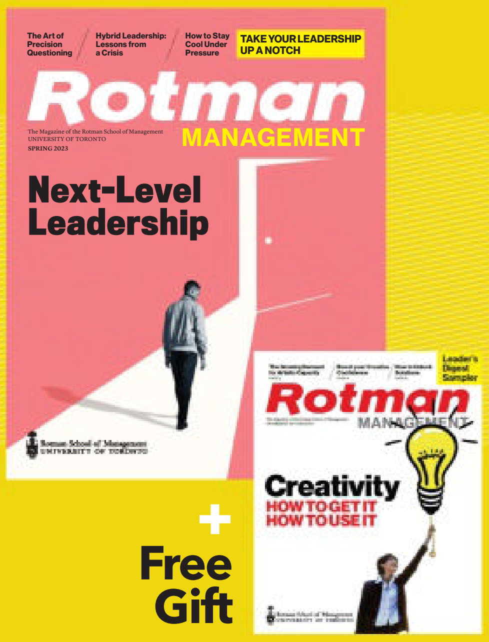
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Over a glass of wine, timing was everything.

It only took a few minutes into our tasting, until Brian our advisor, noticed the date stamp on the cork and asked if we have really had the vineyard that long. It was true, and it had grown substantially in the 20 years since we started. He followed up that question with an even more important one… Was our estate updated? It wasn't, meaning if anything were to happen, it would leave our two sons with nothing. And as I was about to go in for emergency surgery the very next week, Brian immediately got on the phone with an attorney local to our area. Within a few days, our entire trust was re-drafted and solidified just in time. The surgery went well, but our peace of mind knowing that our boys would be taken care of was everything. Brian understood our story to make that happen. He understood the meaning of **the little things.**

— James, Newport Beach

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IN THEORY

How to Boost Your Sales Reps' Performance

There's a delicate balance between finding potential customers and signing them up.

IT CAN BE vexing to answer the phone only to discover an auto insurance sales rep on the other end of the line. The next time that happens, though, consider cutting the rep some slack. Drivers in the United States spend an average of $1,771 a year on full-coverage car insurance, with rates in some cities topping $6,200. But finding and recruiting customers for such plans isn't easy.

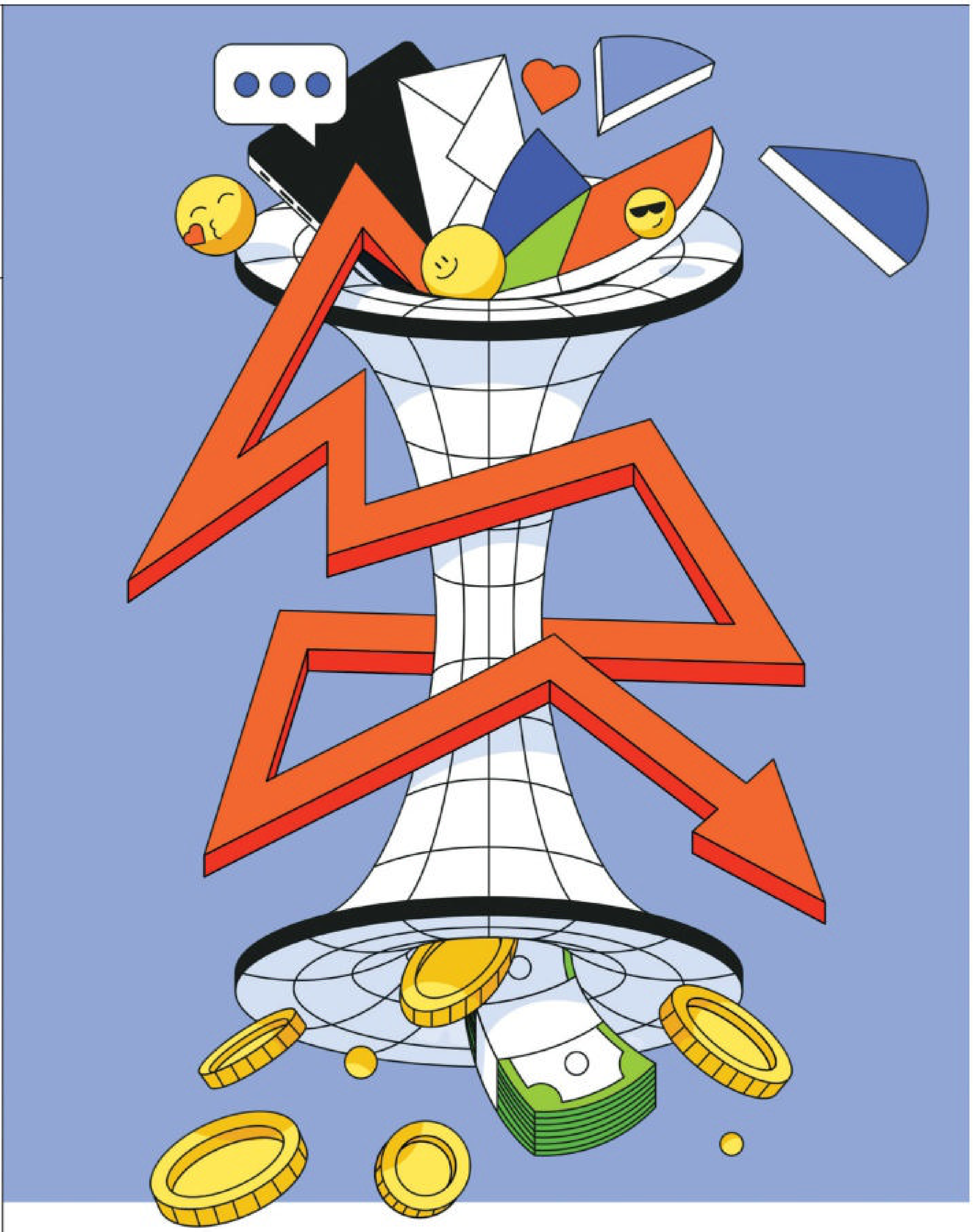
The University of Missouri's Srinath Gopalakrishna and colleagues studied the auto insurance industry to learn more about what drives sales success. In particular, they wanted to examine the rep's role throughout the sales funnel, from prospecting for leads to converting those leads into customers. They studied 538 agents at a $1 billion regional

Illustrations by **LINN FRITZ**

insurance company in the Midwest. The agents were tasked with growing their customer base over the course of two years, which required them to focus on both generating and converting leads. They were compensated on a straight commission basis, which allowed the researchers to more accurately assess motivation than if the agents had been salaried. And the agents had an advertising budget of several hundred dollars each to use as they saw fit.

To tease apart the roles that prospecting and converting played in new customer acquisition, the researchers measured each rep's prospecting efficacy—defined as the number of potential customers identified—and conversion efficacy, or the share of those prospects who went on to buy policies. They also evaluated extrinsic and intrinsic motivation. Extrinsic motivation was assessed by looking at things such as sales competitions and performance bonuses. Intrinsic motivation was estimated using agents' responses to survey questions about why they sell: to fulfill a desire to achieve something, to tackle the challenge of selling, or to cherish the feeling of performing a useful service.

The researchers' analysis showed that motivation, opportunity, and ability drove prospecting efficacy in a straightforward way, but the relationship of those variables to conversion efficacy was more complex. Somewhat surprisingly, experienced reps found fewer prospective customers than novices did. But that didn't necessarily hurt their overall performance, because they excelled at conversion. Advertising boosted both prospecting and conversion efficacy but was more beneficial among experienced reps. And the success of managerial levers to enhance both kinds of efficacy depended in part on reps' level of experience.



WHAT MANAGERS CAN DO

Gopalakrishna and his team offer recommendations for sales managers looking to bolster their reps' productivity.

Help sellers prospect and prospectors sell. Prospecting is, of course, a necessary first step. But generating too many leads limits a seller's bandwidth for converting them into customers. "Prospecting is not just throwing a quote out to interested buyers," Gopalakrishna says. "To generate a quality prospect you have to talk to each person to figure out their needs. You have to provide a highly informed quote. That takes time—and if you do too much of it, you won't have enough time to close with others."

Tempting though it may be, managers should avoid the approach some companies take: having novice sellers exclusively prospect and experienced sellers exclusively close deals. Instead, they should consider each seller's proficiency with each stage of the sales funnel

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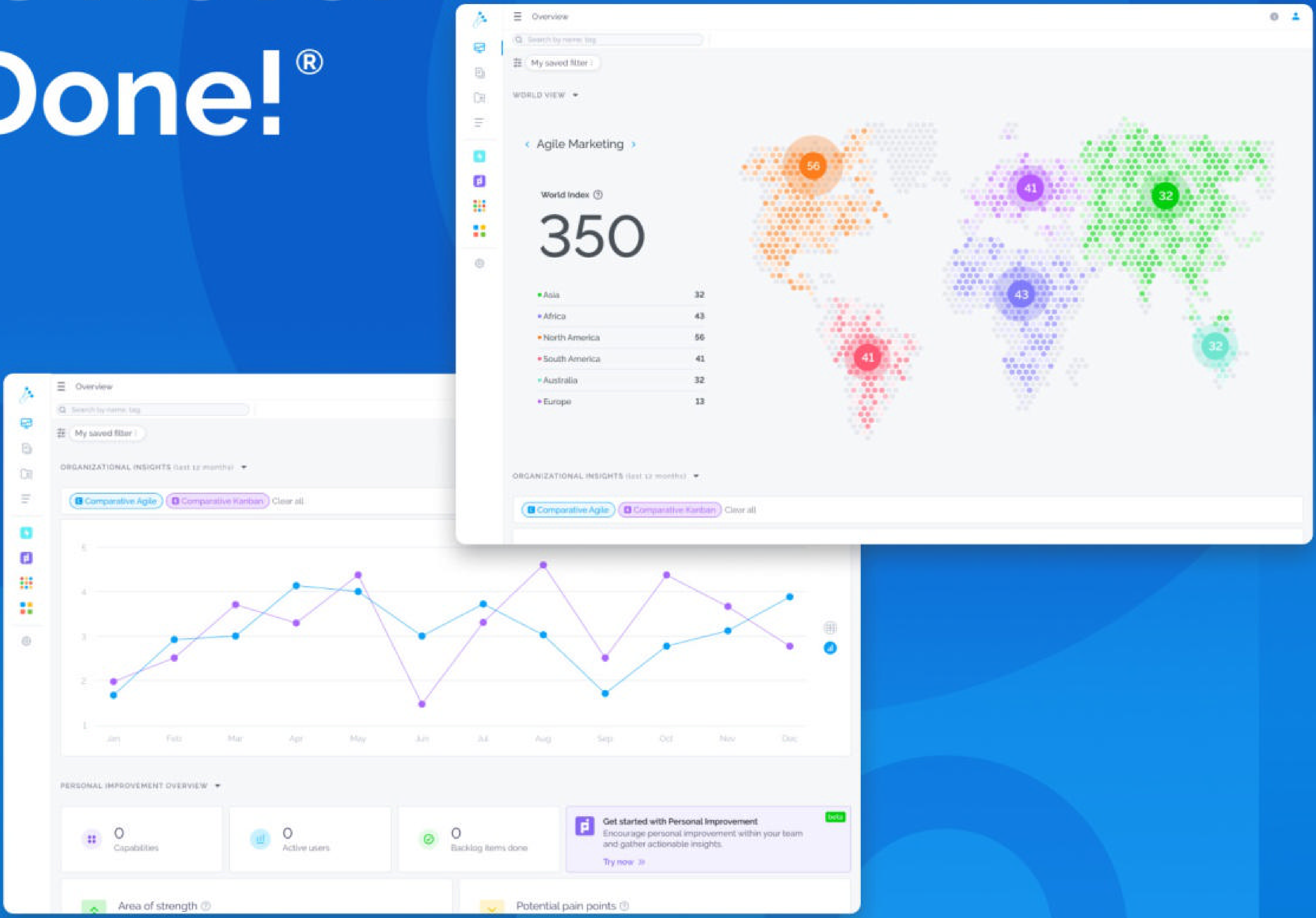
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and support agents wherever they most need help, working with reps individually to find the sweet spot between the two activities. "If you hire people only to prospect, they'll feel a sense of incompleteness," Gopalakrishna says. "Salespeople like to see the end of the funnel. If you tell them to stop in the middle, they will feel cheated out of the best part of the job." In conversations with sales executives, he finds that prospecting is frequently cited as a pain point: "It always seems to be a challenge and to negatively impact morale."

Seek intrinsically motivated reps. Although there's no hard-and-fast metric for intrinsic motivation, managers should try to identify and hire for that quality. The research showed that intrinsic motivation improved both prospecting and conversion efficacy. Gopalakrishna suggests looking for reps with long track records of success in similar roles. Such people are more likely than others to be drawn to sales for personal reasons rather than external rewards, such as the possibility of big bonuses or commissions. They're also more likely to be intrinsically motivated than someone who has bounced from profession to profession before landing on or returning to sales. Intrinsic motivation is most important for experienced agents, because it counteracts the burnout arising from often-frustrating prospecting efforts.

Use external motivators primarily to boost experienced sellers' prospecting efforts. As noted, experienced reps underperformed when it came to prospecting—so managers should focus the bulk of their extrinsic motivators on increasing those reps' identification of potential customers. Given that seasoned reps excel at closing deals, there's a big upside to doing so.

Devote more ad dollars to experienced sellers—within reason. Seasoned reps leveraged their closing skills even more effectively when they had advertising to support them; they were skilled at complementing the ads' messaging. Their less-experienced counterparts, by contrast, saw little gain in closed sales from increased advertising spending. "Your ad budget will provide the biggest bang for your buck with experienced sellers," Gopalakrishna says. "But you'll eventually get to a point where you've maximized returns."

So managers should weigh how many advertising dollars to allocate to experienced sellers—who already have networks of current and former customers to draw on to find new clients and maximize returns—against how many to direct toward less-experienced sellers to grow their networks so that they can reduce their reliance on cold-calling.

"Just as a sweet spot exists for how much time reps spend prospecting versus converting, there's also a sweet spot for allocating advertising budgets," Gopalakrishna says. "Our findings show that it's important to understand the entire sales process, not just to think about the end results. Too many sales managers have a purely bottom-line mentality."

HBR Reprint F2304A

ABOUT THE RESEARCH *"Hunting for New Customers: Assessing the Drivers of Effective Salesperson Prospecting and Conversion," by Srinath Gopalakrishna, Andrew T. Crecelius, and Ashutosh Patil (Journal of Business Research, 2022).*

IN PRACTICE

"Go Beyond the Work and Learn What's Personally Important to Your Sellers"

JASON VALLEJOS *is the executive vice president and chief strategy officer at Syndicated Insurance, a Los Angeles–based agency. He spoke with HBR about what motivates sellers, how managers can tap into their potential, and why service-mindedness is crucial. Edited excerpts of the conversation follow.*

Are your newer sellers better at prospecting than your more-experienced ones?

Yes. Newer agents are hungry. More-experienced agents can get complacent. They've built up a book of business, and the income from it sometimes means they get comfortable and think they don't have to work as hard. Experienced sellers are capable prospectors, though. We just need to refocus them on that task.

How do you do that while also helping newer sellers close?
We're constantly training. Every week we run through narratives about how to prospect and close. We try to hire empathetic people, and we work with experienced sellers on rebuilding empathy for the customer. Our sellers should want to help the people they serve. If they are helpful, the money comes organically.

The research found that giving sellers a personal advertising budget helps. Do you agree?
Absolutely! Last year we gave our sellers a marketing fund for the first time. It was our best year ever: We grew by 282%. Most agents used the budget to meet groups of prospective customers and hold lunch-and-learns for existing ones. We tracked which sellers and methods did best. The lunch-and-learns were by far the most successful initiative. Online ads did well too. The only things that didn't yield any return were direct-mail postcards. We won't do those again.

What do you look for when hiring sellers?
We want people who are passionate about the service we offer. We're always on guard against "commission breath"—when people are so hungry that instead of asking about our products or how we serve our community, they want to know "How much will I make per transaction?" We've had strong performers who came from the hedge fund world. They were good at closing and made good money. But they didn't enjoy the job, because they weren't service-minded, and they didn't stay.

What external motivators do you use?
You've got to go beyond the work and learn what's personally important to your sellers. One agent needed to earn a certain amount for a down payment on a home. So for three months we did what I just complained about: He and I went into transactional thinking. We determined how many sales it would take to earn the down payment and focused solely on hitting that target. The goal was met, and he bought the home. I wouldn't have known how to motivate him had we not talked about his personal situation and financial goals. And he continues to do very well, generating steady growth and bringing in long-term clients.

What about coaching?
Success isn't always about motivation. One new seller didn't perform well at the start. But I saw potential in him, and he was clearly motivated. After watching him try to sell, I asked him to demonstrate vulnerability to clients—to let them know who he is. I said, "Don't be a robot. If you don't know something, tell the customer you'll get back to them." He's now a top performer. But he wouldn't have improved if I'd simply increased his quota or offered a new prize for top sellers.

Photograph by CHRISTINA GANDOLFO

AI AND THE BATTLEFIELD

U.S. national security experts were 22 percentage points less likely to say they'd support a preemptive military strike if an AI system rather than human officers had analyzed the relevant intelligence. And they were more likely to favor retaliation for a rival's accidental killing of U.S. troops if the strike was ordered by AI. "Algorithms and Influence: Artificial Intelligence and Crisis Decision-Making," by Michael C. Horowitz and Erik Lin-Greenberg (2022)

ONLINE RETAIL

Even Tiny Website Slowdowns Can Be Costly

It's no surprise that a slow website can frustrate customers and cause some to log off without completing their purchases. Now researchers have quantified the effect, finding that delays of just a fraction of a second can mean a significant hit to sales.

The researchers obtained two years' worth of daily sales and visitor data from seven large international apparel brands along with data on specific website pages of a personal hygiene brand. They mapped that against detailed website performance data from the digital-experience management company Catchpoint. This showed that a 10% increase in website load time led, on average, to a 2.4% decrease in revenue per visitor and a 4.2% decrease in total sales and that customers who experienced a slowdown were less likely to revisit the website later that day. People were most sensitive to delays when checking out, perhaps because of the transactional nature of the task, the lack of experiential elements to keep them engaged, and the pain of making a payment. The impact was somewhat larger on the mobile channel than on the desktop one. And sales lost to sluggish performance did not appear to be recovered in subsequent days.

Some internet slowdowns are unavoidable, of course, but the researchers say that retailers can take several measures to improve their websites' average speed. Because third-party content providers inflate load times considerably, retailers should choose them selectively and limit their numbers at the critical checkout stage. Likewise, "retailers can simplify the checkout page by only providing and collecting essential information from customers," the researchers write. "Offering faster payment options such as Apple Pay and Google Pay can also reduce frictions and customers' perceived waiting times."

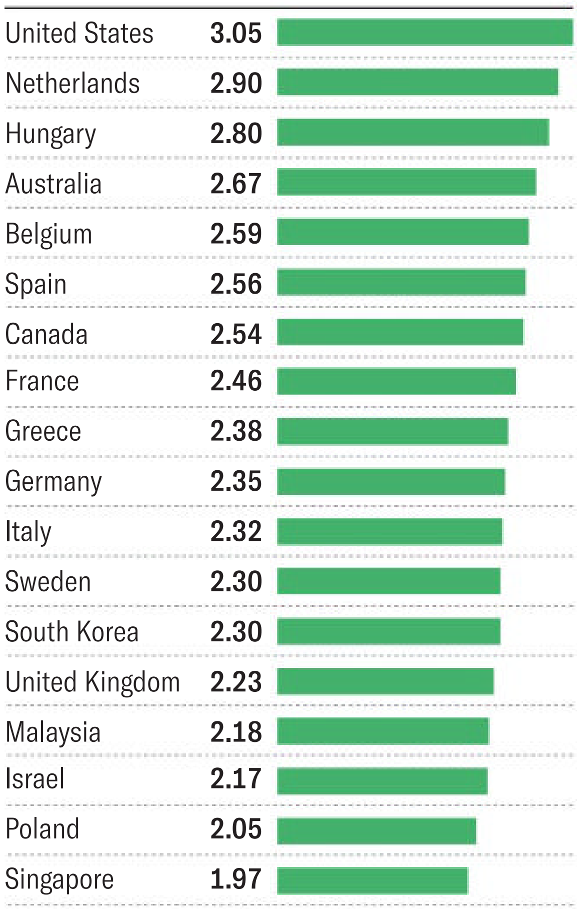
ABOUT THE RESEARCH *"Need for Speed: The Impact of In-Process Delays on Customer Behavior in Online Retail," by Santiago Gallino, Nil Karacaoglu, and Antonio Moreno* (Operations Research, *forthcoming*)

TECHNOLOGY AND SOCIETY

Is Social Media a Bad Influence?

Not necessarily—and not to the same extent everywhere—according to nearly 25,000 people surveyed in 2022 on questions such as whether social media has made people less civil and informed and more divided.

Average number of negative effects reported by citizens, out of six



Source: "Social Media Seen as Mostly Good for Democracy Across Many Nations, But U.S. Is a Major Outlier," by Richard Wike et al. (Pew Research Center, 2022)

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1. Circular economy as defined by Ellen MacArthur Foundation. (2022). ***Circular Economy Introduction.***
   Source: ellenmacarthurfoundation.org.
2. Marsh, J. (2021, May 3). ***Food Packaging Waste Statistics: Understanding the Rise of Food Packaging Waste.***
   Source: Environment.co.

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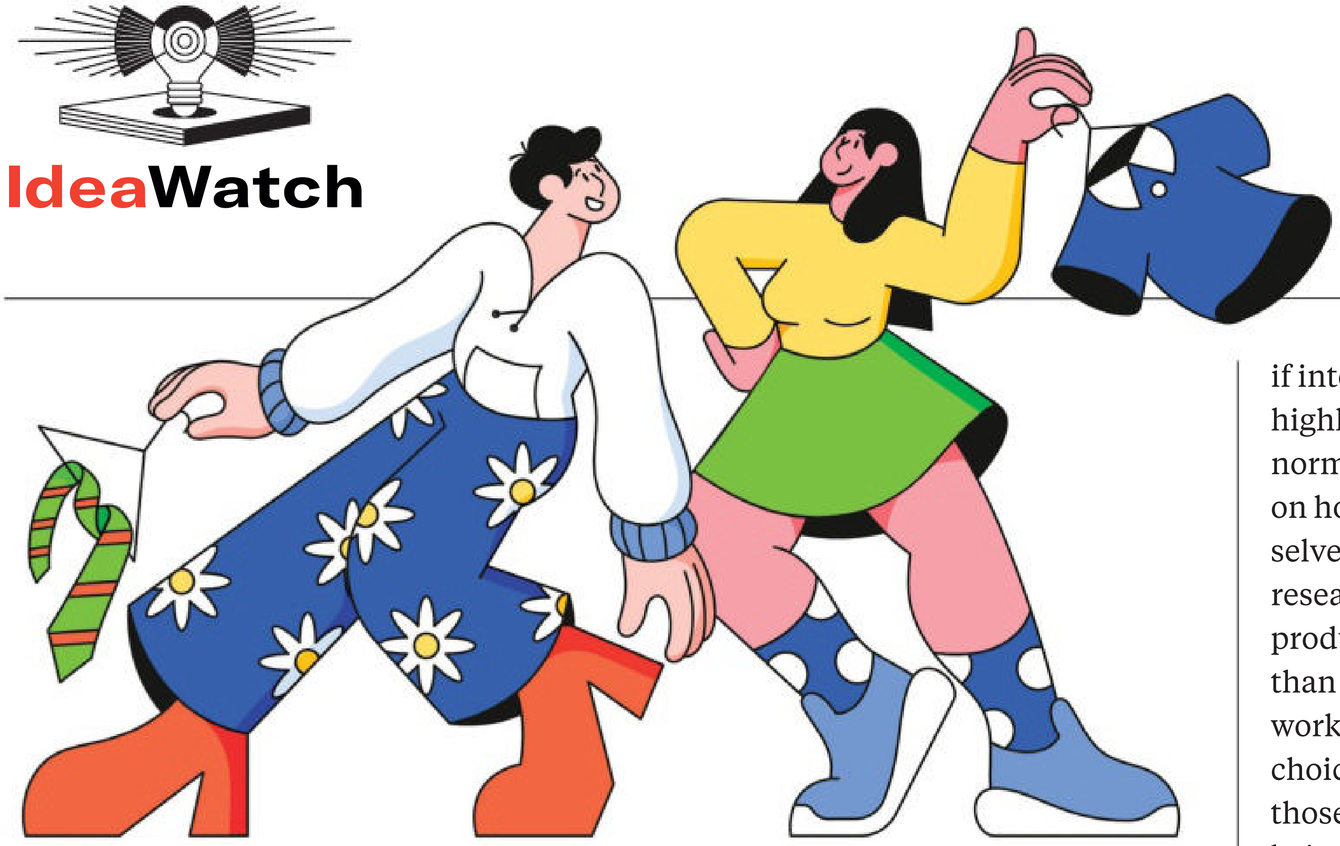


WORKPLACE ATTIRE

Not Getting Enough Done? Your Clothes Might Be Part of the Problem

We know that our workplace clothing choices can affect how others perceive us and influence our success. Do those choices also shape outcomes by affecting how we see ourselves?

Researchers conducted two experiments in the United States and a field study in South Korea to investigate the meanings employees associate with their dress. In the first experiment, participants viewed photos of various outfits and indicated what they thought each would convey in a "business casual" office. In the second, participants first changed into business-casual clothing and then into new business-casual outfits they selected to correspond with one of three randomly assigned characteristics: aesthetics, conformity, uniqueness. A control group was asked to select an outfit similar to their first one. All participants were told to imagine that they worked at a company where people could generally wear what they wanted to and where most chose business-casual dress. After each clothing change they reported on how they would feel going to work in what they had on, what they thought their clothing would convey, and their level of self-esteem. The experiments showed that people associate clothing high in aesthetics with personal attractiveness, conforming clothing with a sense of belonging, and unique clothing with distinctiveness, and revealed that each of the three qualities raised self-esteem.

The field study involved 84 white-collar employees who worked on-site and were free to choose their attire. They filled out three questionnaires daily for 10 days, reporting on what they were wearing, their self-esteem, their interactions with (and any social avoidance of) colleagues, and their productivity. Aesthetic and unique clothing boosted self-esteem, which in turn boosted progress toward job goals and diminished social avoidance. Dress conformity had similar effects, but only on days when employees frequently interacted with colleagues.

"Investing a little extra time in the morning to prepare an outfit that is aesthetically pleasing and unique—and, if interactions with others are expected, highly conforming to organizational norms—can have a meaningful impact on how an employee feels about themselves throughout the workday," the researchers write. Indeed, the effects on productivity were similar to or stronger than gains from planning for the day's work activities, while poor clothing choices sparked losses comparable with those from having an abusive boss, being treated rudely by others, or experiencing a disruptive morning routine.

ABOUT THE RESEARCH *"Wearing Your Worth at Work: The Consequences of Employees' Daily Clothing Choices," by Joseph K. Kim, Brian C. Holtz, and Ryan M. Vogel* (Academy of Management Journal, *forthcoming)*

GENDER

How Summertime Fuels the Gender Wage Gap

Researchers have expended considerable effort trying to understand the persistent lag in women's earnings relative to men's. Here's another contributing factor: summer. A new study quantifies the differential impact of school vacation closures on men and women in the U.S. workforce.

The researchers analyzed data gathered by the Bureau of Labor Statistics' Current Population Survey, starting with the survey's inception, in 1989, and concluding in 2019, just before the advent of the Covid-19 pandemic. This showed that from May to July each year, the employment-to-population ratio among women dropped by an average of 1.1 percentage points, while the same ratio among men rose slightly. And the total time worked by women fell by an average of three hours per week, or 11%. That was twice as large as the decline experienced by men.

Those patterns track with state-by-state differences in the timing of summer breaks, and the declines in employment are concentrated among women with young school-age children; many of those women shift in summer months from employment to childcare. (Evaluating the amount of vacation time taken by various segments of women revealed no signs that increased leisure is the primary factor.) Women are disproportionately represented in educational services, the researchers note, and employment opportunities in those sectors contract sharply during the summer. The data showed that mothers tend to enter the field when their youngest children are old enough to attend school—evidence that many are choosing education-related jobs in part for the summertime flexibility they offer, often sacrificing higher compensation elsewhere.

"The heavy imprint of school summer breaks on female labor force participation, employment, and earnings highlights the potential need for policy solutions to alleviate the remaining barriers to women's equal participation in the labor force," the researchers write. "Options such as extending the school year, providing universal access to summer school, or increasing federal support for summer childcare could simultaneously address both labor market and educational implications of summer school closures."

ABOUT THE RESEARCH *"The Summer Drop in Female Employment," by Brendan M. Price and Melanie Wasserman (working paper)*

INFLUENCER MARKETING

What Factors Boost Engagement?

Seven variables affect engagement, according to a 2022 analysis of more than 5,800 influencer posts on the Chinese social media platform Weibo.

	Influencer				Post		
CHARACTERISTIC	Number of followers	Posting frequency	Follower-brand fit	Originality	Positivity	Includes link to brand	Announces a new product
EFFECT ON ENGAGEMENT	↑ +9% from a one-standard-deviation increase above average	↔ Highest engagement from moderate frequency	↔ Highest engagement from moderate fit	↑ +16% from a one-standard-deviation increase above average	↔ Highest engagement from moderate positivity	↑ +11%	↓ -31%

Source: "Does Influencer Marketing Really Pay Off?" by Fine F. Leung et al. (HBR.org, 2022)

WELL-BEING

Diversify Your "Social Portfolio"

Several years ago the Harvard Study of Adult Development reached a conclusion about well-being. It's not money or fame that makes people happy and healthy, the researchers said; it's relationships. A new study by other researchers offers a postscript: The variety of a person's relationships—not simply their quantity or closeness—is also key.

The researchers analyzed four data sets representing more than 50,000 people in eight countries. They adapted the Shannon Diversity Index, used to describe the species in a biological ecosystem, to measure people's "social portfolio diversity": the number and distribution of the various types of relationships engaged in during specific periods of time. For example, they examined three years' worth of responses to the American Time Use Survey, which details the daily activities of a representative sample of U.S. citizens. Respondents reported what they were doing when, for how long, and with whom and answered questions about their health and quality of life. Analysis showed that social portfolio diversity was a highly reliable predictor of well-being. Studying the three other data sets—the World Health Organization's Study on Global Ageing and Adult Health, survey responses from users of a French mobile app, and questionnaire responses from U.S. residents—yielded similar results. In three of the four data sets, social portfolio diversity was a stronger predictor of subjective well-being than being married was, even though marriage is a well-documented determinant of health and happiness.

"People's time is scarce, such that increasing the number or frequency of social interactions can prove challenging," the researchers write. "Our results suggest that a more relationally diverse social portfolio may offer a time-neutral means of shaping well-being."

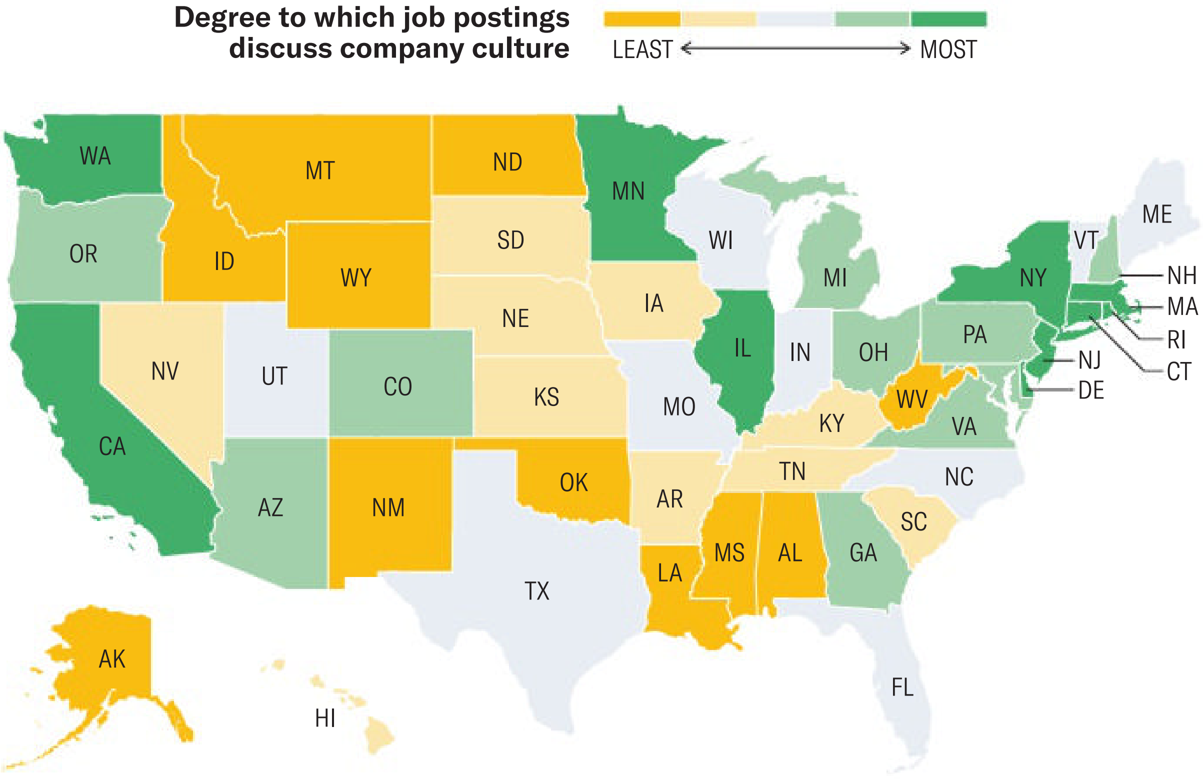
ABOUT THE RESEARCH *"Relational Diversity in Social Portfolios Predicts Well-Being," by Hanne K. Collins et al.* (Proceedings of the National Academy of Sciences, *2022)*

IdeaWatch

EMPLOYMENT

Where Job Postings Emphasize Culture

For many people, company culture is an important factor when assessing prospective employers. An analysis of nearly 25 million job postings from 2010 to 2020 shows the states in which companies are most and least likely to include information about culture.



Source: "Communicating Corporate Culture in Labor Markets: Evidence from Job Postings," by Joseph Pacelli, Tianshuo (Terrence) Shi, and Yuan Zou (working paper)

WORKPLACE COMPETITIONS

Who's Most Likely to Transgress?

Countless organizations hold contests to engage and motivate employees and boost performance—but competition sometimes pushes people to bend or break the rules. A new study finds that two groups are especially prone to doing so: underdogs enjoying an unexpected winning streak and favorites in a slump.

The researchers reached this conclusion after studying people in four competitive contexts: participants in U.S. fantasy football leagues, professional soccer players in the English Premier League, U.S. public defenders in a trial simulation, and Republicans and Democrats who were told they were competing in an American history quiz. In the study of the Premier League, for example, the researchers tracked each team's winning or losing streak preceding every game played over 18 seasons. They used the odds posted on two popular betting websites to designate teams as favorites or underdogs. The number of yellow cards a team's players received—given for unsportsmanlike or overly aggressive behavior—indicated that team's level of transgression in each game.

For underdogs, transgressions tended to follow winning streaks—and each additional win increased the chances of receiving a yellow card by an average of about 4%. Transgressions did not rise after losing streaks. For favorites, it was just the opposite: Transgressions followed losing streaks—and each additional loss increased the chances of receiving a yellow card by about 5%—but were not associated with winning streaks. Similar patterns emerged from the other studies.

In the experiments involving the trial simulation and the history quiz, the researchers probed the psychology that might have driven the results. Underdogs who are overperforming and favorites who are underperforming experience heightened outcome uncertainty: the possibility that their next performance will deviate from what people usually expect from them. For underdogs, the prospect of overcoming negative expectations often leads to particularly high levels of excitement, while for favorites, the thought of failing to measure up can magnify anxiety. Both are high-arousal emotions that lead people to single-mindedly focus on achieving their desired outcome, frequently crowding out ethical concerns.

"Transgressions are not only costly to firms' short-term bottom line...but they can also be socially learned...and create long-term reputation damage," the researchers write. They point out that in the wake of the 2015 Volkswagen emissions-cheating scandal, many VW employees described a culture of intense competition in which officials routinely inflated their production rates. "Thus," the researchers conclude, "it is critical for organizations—especially those where explicit competitions are frequent—to understand when and why competitions prompt transgressive behaviors."

ABOUT THE RESEARCH *"Surging Underdogs and Slumping Favorites: How Recent Streaks and Future Expectations Drive Competitive Transgressions," by Sarah P. Doyle et al. (Academy of Management Journal, 2022)*

INVESTING BY THE STARS

Chinese households were two percentage points more likely to make no-risk investments during their so-called zodiac year—the year corresponding to the symbolic animal of their birth month—which is thought to bring bad luck. And the stock of Chinese firms is less volatile during the chairman's zodiac year. "Superstition and Risk-Taking: Evidence from 'Zodiac Year' Beliefs in China," by Raymond Fisman et al. (2022)

REDUCING INEQUALITY

How Platforms Can Help Black-Owned Businesses

In June 2020 Yelp rolled out a tool giving Black-owned businesses the option of identifying themselves as such in their listings and allowing consumers to explicitly search for them. The feature was meant to bolster Black entrepreneurs, who were hit especially hard by the Covid-19 pandemic. A research team has now evaluated its effects.

The team studied weekly data from Yelp on more than 40,000 restaurants in seven large U.S. metropolitan areas from April 2019 to August 2021. It looked at the number of times users visited each restaurant's Yelp page, the number of visits to the restaurant's website, the number of calls placed to the restaurant through the platform, and the number of orders placed and revenue earned through the platform. It also collected information on factors such as location and star ratings and, for restaurants with Black owners, whether the business was identified as Black-owned (either because the owners had added that label to their page or because multiple reviewers had tagged it). Using cell phone data from a different platform, it counted in-person visits to each restaurant. To assess the effects of explicitly mentioned Black ownership, it compared restaurants labeled or tagged as Black-owned with others that had similar characteristics. Finally, it looked at political leanings and racial attitudes in each area, drawing on 2016 election results and data from Project Implicit's "Implicit Association Test."

Identifying as Black-owned or being tagged as such turned out to be very good for business. Restaurant page views rose by an average of 33%. Website views and calls rose by more than 50%, while total orders and revenue increased by at least 30% and in-person visits rose by about 10% a week. The gains were strongest in Democratic-leaning areas and where people had weak associations between "white" and "good," suggesting low implicit bias. And they were driven largely by white consumers, indicating latent demand for ways to support minority businesses.

"Our findings suggest that digital platforms can effectively boost the performance of minority firms, particularly during a time of increased national awareness of the challenges that Black business owners face," the researchers write. "This approach stands in contrast to platform policies that seek to reduce the potential for racial bias by concealing...racial identity."

ABOUT THE RESEARCH *"Black Ownership Matters: Does Revealing Race Increase Demand for Minority-Owned Businesses?" by Abhay Aneja, Michael Luca, and Oren Reshef (working paper)*

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IdeaWatch

Michael Wyrwich of the University of Groningen and Viktor Slavtchev, a researcher with the German government, studied TV signals in East Germany from the 1960s to 1989 and individual and local rates of entrepreneurship there after German reunification. They found that people in households with access to West German broadcasts were more likely than other East Germans to launch companies later in life. That was especially true of those who were children or at the start of their careers. **The conclusion:**

The TV You Watch When You're Young Can Make You More Entrepreneurial

Professor Wyrwich, DEFEND YOUR RESEARCH

WYRWICH: What you observe when you're young affects how you behave when you're older, and that includes the professional decisions you make. We know from other research that if you grow up around lots of entrepreneurs, you're more likely to become one yourself. My colleague and I wanted to find out whether a similar effect extends to culture—specifically, to television. We thought that if you saw people on TV acting like managers or entrepreneurs, you might think more positively about those professions. You'd also see examples of how a market economy operates.

HBR: How did the study work? The division of Germany after World War II provided a natural experiment. Most of East Germany could receive TV signals from West Germany, but because of technical and topographical factors, some areas couldn't. We compared the availability of signals with data from a credit-rating agency on levels of business creation in various regions of the former East Germany.

How large was the difference? In the period we analyzed, 1993 to 2016, the rate of business creation was more than 10% higher in areas that had received broadcast signals from West Germany. It was greatest among people who were children or young adults when they'd watched the Western shows. And it persisted: The parts of the former East Germany that got TV signals from West Germany are still more entrepreneurial than those that didn't.

How can you be sure that TV shows were the cause? We could see two other possible explanations, but we think we've ruled them out. The first was geography. If the ability to receive TV signals from West Germany correlated with households' distance from that country, it could be that the determining factor was simply proximity to West Germany and its large economic market. But we didn't find that correlation—suggesting that access to TV, not physical closeness to a capitalist country, drove the heightened rates of entrepreneurship.

The second potential confounding factor was internal migration. Did East Germans who were sympathetic to the West—and thus presumably more interested than others in one day participating in a free-market economy—move to certain areas specifically to gain access to Western TV? We also ruled that out, because mobility within East Germany was severely restricted by the government.

How did shows in the two countries differ? West German TV was a mix of

Illustration by JOEL KIMMEL

From 1993 to 2016 the rate of business creation in the former East Germany was more than 10% higher in areas that had received TV signals from West Germany.

domestically produced programs and American ones, such as *Dallas*. The shows weren't necessarily about entrepreneurs; it's not as though things like *Shark Tank* were airing, so East Germans weren't going to learn how to start a business. But they could see how people made a living in a market economy, and they could see that entrepreneurial behavior might lead to a fortune.

East Germany aired several ideological shows. A famous one was *Black Channel:* snapshots taken from West German programs and overlaid with commentary to show how bad life under capitalism supposedly was. The shows in the East were pretty uninspiring, so people tended to be drawn to Western shows if they were available.

Would you expect the same results from exposure to other media? We'd most likely find similar effects with radio; there's evidence that radio programs can affect people's behavior in general. Access to broadband internet can too. But I think the visual component of TV is especially powerful.

What else do we know about how culture affects entrepreneurship? An important factor that's not on many people's radar is that levels of entrepreneurship can differ dramatically among places with similar laws and policies. There are huge differences within countries, and they last for decades—even centuries. That points to a role for regional culture.

You can see this in parts of Europe and the United States that were once home to coal mines or steel factories. When the coal and steel operations began, in some cases 100 years ago, everyone worked for large companies. Very few people worked for themselves. Even after the economies of those places changed, they had relatively low levels of entrepreneurship.

Munich provides another example. Siemens moved its headquarters there in the late 1940s. The company had originally operated out of Berlin, but the separation of the city and the political instability of the time made that location risky. That historical accident became one of the cornerstones of Munich's thriving entrepreneurial ecosystem. Although Siemens is a large company, it has attracted scientists and innovators who subsequently have gone on to start their own firms.

An interesting question is why these effects are so enduring. We know that role models and peers matter: Your chances of becoming an entrepreneur are influenced by who's around you. But we don't have a systematic account of how the effect continues over time.

Do your results suggest anything about how governments could encourage entrepreneurship? They suggest that campaigns promoting entrepreneurship could boost the number of new businesses by making people more aware that starting their own company is an option.

When it comes to cultural influences like TV, though, things are tricky. You don't want politicians to use culture to force their ideology on people. There was an interesting analysis done by a marketing firm some years ago in Germany, where there's a popular TV detective series called *Tatort*. The firm analyzed the murderers on the show by occupational background. Guess which group was in the top position? Entrepreneurs and managers. Professional gangsters were second. I don't know if policy makers could affect such things, but our work indicates that these sorts of negative portrayals could hypothetically mean fewer new companies.

Are you working on any related research? I have another study with several colleagues from Groningen exploiting the natural experiment created by the two Germanys. We're looking at entrepreneurs' decisions to partner with other organizations for R&D. Our hypothesis is that because innovation and collaboration require a high degree of trust, East Germany's years in the Soviet bloc might make a difference. It's been well-documented that totalitarian regimes destroy trust among their citizens: You don't know if you can talk frankly with your neighbors, because they might be spying for the secret police.

There are county-level records on the share of East Germans who worked for the secret police. Analyzing them and looking at where business owners were from, we learned that if founders of start-ups in the former East Germany grew up in a county with a lot of informers, they were less likely than other founders to partner on R&D.

Although the two studies look at new businesses from different angles, there's a constant: Place and context really matter for entrepreneurship.

Interview by **Walter Frick**

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A Cofounder of Ralabs on Leading a Ukrainian Start-Up Through a Year of War

by Roman Rodomansky

THE FIRST WARNING signs of war with Russia came in January 2022. The threat of invasion began to dominate the news cycle, and my team and I started daily monitoring of the growing number of Russian troops at the border. My girlfriend and I were visiting her family in southern Ukraine for the holidays and already thinking about emergency scenarios: ensuring that our car always had a full tank of gas, making plans for the worst.

When I got back to Lviv in early January, my cofounder, Andrew Yasynyshyn, and I decided it was time to start working on a business continuity plan, or BCP, for our six-year-old software-development company, Ralabs. We and the directors of each department (delivery, HR, finance, recruiting, and engineering) worked to outline four scenarios, each representing a different level of Russian action, Ukrainian response, and associated risk with respect to security, business infrastructure, and market environment. We then planned decisions that would be triggered by various events. For example, if more Russian armed forces began to

Photograph by GIANFRANCO TRIPODO

> We talked nonstop with our international customers to gauge how nervous they might become about doing business in Ukraine.

build up at the border, we would begin communicating weekly with employees and customers, and if those forces exceeded 300,000 soldiers, we would relocate critical IT infrastructure to safe locations.

We watched the news to better understand the challenges our own people and operations might confront, and we talked nonstop with our domestic and international customers to gauge how nervous they might become about doing business in Ukraine. At the time, some people may have thought we were going overboard. Although such a comprehensive BCP might be typical at larger companies, it's a little unusual for a smaller organization like Ralabs. But for us, on the ground in Ukraine, it just seemed prudent. I may be fairly cautious and pessimistic by nature, but by then even the calmest and most optimistic among us was taking the threat seriously.

Our planning paid off, of course, on February 24, when Russia invaded Ukraine. We had already helped about 30% of our employees relocate to Poland and other countries; allocated budget for BCP-related activities; developed HR policies for emergency situations such as local evacuations, being drafted into the army, and international relocation; and conducted a number of educational programs—on topics ranging from mental health, first aid basics, managing in a crisis, and putting together an emergency "bugout" suitcase to legal information about military mobilization and personal finances—to help our employees feel prepared.

As a result, although our performance took a hit in the immediate aftermath of the invasion, we were back at 90% of typical output just a few weeks later. That has essentially continued, if not improved, over the past year, and sales to both new and existing customers have not been significantly affected. More important, we've been able to support our people through a frightening, dangerous time, and we continue to do everything we can to keep them safe, motivated, and effective.

I'm hopeful that the lessons we've learned—around the importance of scenario planning, flexibility, decision-making, and guiding customers and employees through uncertainty—may be helpful both to other Ukrainian organizations managing their teams through this war and to leaders around the world faced with navigating any crisis.

A NEW NORMAL

Andrew and I launched the product-development firm Ralabs in 2016, he as the CEO and I as the COO. We are both former engineers, so we knew the typical pain points and branded it as "by engineers for engineers." By early February 2022 we'd decided to focus exclusively on software engineering and had built up a roster of more than a dozen clients within Ukraine and across the United States and Europe. We had 67 full-time employees, 80% of whom lived in Ukraine, and about half of those were working out of our headquarters in Lviv. Annual revenue was $3.4 million and growing at a rate of 25% a year.

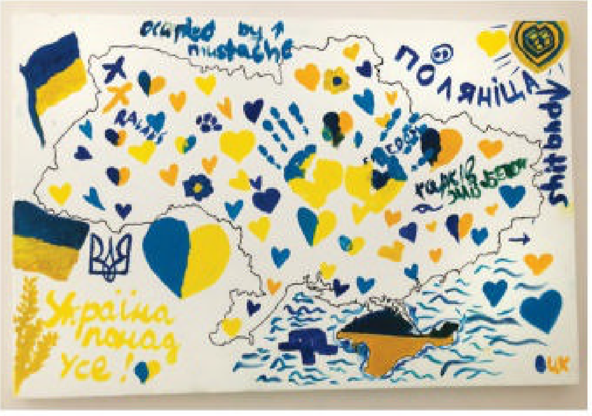
Even as political experts, the media, and our business mentors grew increasingly worried about a Russian attack, and as we ourselves braced for it, we still hoped it wouldn't come. When it did, everything changed.

At 5 AM I woke up to a call from my family: War had begun. Our emergency bags were already in the car, and my girlfriend and I drove to a relative's place outside Lviv, in the mountains—the plan we and our families had agreed on. Some friends and colleagues also escaped the city; others stayed put.

It's hard to describe what we all felt that day. Despite the predictions and preparations, it didn't seem real. It was like living in a dream or an action movie that wouldn't end. The confusion and disbelief gave way to fear, despair, and anger that everything we held most dear might be destroyed. But at the same time, everyone in Ukraine was determined to do whatever it took to protect our families, our friends, our businesses, and our country.

The Ralabs leadership team knew that we needed to be as calm and collected as possible to implement the plan we'd developed and support our employees in this moment of crisis. For two days we concentrated on making sure everyone was safe. We allowed for flexible hours, part-time work, or emergency leaves as needed; we provided funds and support to help employees relocate; and we assisted people in organizing various relief and volunteer activities, both within the company and in the larger community.

Then, on Monday, February 28, we had our first post-invasion all-hands virtual meeting. People called in from the road, from countries across Europe, from their basements, or while waiting in line for weapons at Ukraine's newly



Top: A monthly all-hands meeting.
Bottom left: A strategy session in Lviv to discuss the business continuity plan.
Bottom right: A map of Ukraine painted by employees at a summer gathering in 2022.

Courtesy of Ralabs

commissioned territorial-defense outposts.

Luckily, our BCP outlined exactly what to do and was easy to explain to the team. Following the HR policies we'd established, we made allowances for longer-term flexible or part-time work as needed. We emailed all our clients to let them know that developers might have unpredictable or partial availability, and we relied on the 24/7 customer-support system we'd set up—staffed by eight employees who were based outside Ukraine—to provide rapid technical support to anyone with emergency needs. We also allocated budget to ensure that we could provide every employee with a backup generator for electricity and a Starlink for Wi-Fi so that we could stay connected when Russia targeted Ukrainian telecommunications infrastructure.

Perhaps because we'd been routinely updating and communicating our contingency plans in the weeks before the invasion, we received overwhelming support and understanding from clients—despite our sometimes being unable to deliver work in those early weeks. We didn't lose any customers and even continued to add new ones.

Over the next few months we adapted to a new normal. From an operations standpoint, since we're a tech company and had worked remotely during the pandemic, it was no problem to use virtual and asynchronous communication tools. Other challenges required more adjustment. One team member decided that he wanted to serve in the armed forces, so we developed a policy to support him: We paid his full salary for a month, 50% of his salary for the next three months, and a stipend for the following nine months. We've stayed in regular communication with him, and he has expressed both his gratitude for our ongoing support and his confidence that the skills he's learning in the military will make him an even better manager when he returns to work. Some employees wanted to engage in other types of war-related volunteer work, such as fundraising or charity events, and we've done our best to be similarly supportive.

Sales within Ukraine were understandably slower than usual given the business disruptions, so we did have to cut costs. But rather than laying anyone off, we limited raises and asked some customers for payment in advance. And although some international clients were initially hesitant to sign new deals with us, fearing a quick defeat for Ukraine, our BCP—plus a near-universal desire to support the Ukrainian cause—helped them overcome those jitters. One Boston-based customer even told us he was ready to fly to Ukraine, buy a gun, and join the army. As sanctions against Russia and Belarus mounted, we won even more business from companies that sought to avoid working with our competitors in those countries.

By summertime operations had settled, our revenue streams had stabilized, and the management team started meeting for forward-looking—rather than crisis-management—strategy sessions. Despite the ongoing war, we wanted to keep pursuing growth, so we invested more in learning and development programs, launched an updated marketing website, and completed an internal switch to fully English-language operations as part of our long-term strategy to become more international.

That fall we also began to reevaluate some elements of our BCP and operations: We decided to pull back on weekly updates to customers, which had begun to feel excessive; we rented a second office space to support our growing workforce; we increased support and compensation

Ukrainian employees of Ralabs gather in summer 2022. CEO Andrew Yasynyshyn sits in the center.

Courtesy of Ralabs

for coworking spaces as they became a more reliable option; and we shifted to a loan-based approach for generators and Starlinks so that employees could get backup internet infrastructure as quickly as possible. We also expanded our charitable efforts, including holding an auction of donated items that raised $10,000 for volunteer organizations. Since the war's beginning we've donated about $100,000 in cash, Starlinks, and military supplies. From junior-level engineers to senior executives, everyone at Ralabs is motivated to do whatever possible to support the Ukrainian cause.

A YEAR IN

As I write this, in early April 2023, our company's situation is stable. We've identified most of the risks related to the war and we know how to address them. Electricity outages are fewer than one a month and more predictable, so employees can plan their work and stay productive even without the extra equipment we've provided. Our team is up to 87 employees, about 60% of whom are still in Ukraine, and attrition has remained low.

We continue to monitor the political and military situations, update our plans, and keep our internal and external stakeholders informed of them. We've taken steps to move away from the quick, top-down management that was necessary in a crisis and instead distribute decision-making, which both reduces the pressure on our C-suite and avoids unnecessary and demotivating micromanagement. We're also trying to ensure that all Ralabs team members, especially those in Ukraine, take time to rest and recover after a long, hard year.

One remaining challenge is the need to constantly reassure customers that we are a reliable partner while the BBC and CNN continue to stoke sometimes legitimate fears. Some customers want to support our business but feel more comfortable working with Ukrainian developers who have relocated to Poland or Germany than relying on our team in Ukraine. We've tried to address those concerns by not only adding engineers based elsewhere but also ensuring that we still deliver excellent work—from within Ukraine and outside it.

On a personal level, I start my days like a normal guy. I make breakfast for my family and myself; take my bullmastiff, Emma, for a brisk 30-minute walk; and then sync up with various teams virtually, depending on their needs. I often weigh in on project prioritization and take an active role in our monthly planning meetings. After those check-ins I frequently have meetings for run-of-business work such as KPI reviews and engineering-progress updates or higher-level strategic work such as updates related to the BCP and coordinating with the core leadership team. Finally, in the afternoons and evenings, I take calls with key customers and new leads, many of whom are based in Western Europe or the United States. My team and customers definitely make more high-priority requests than they did before the war—but I have systems in place to manage them, on both an individual and an organizational level.

LEADERSHIP LESSONS

This war is not over, of course, and my team and I are learning as we continue to navigate it. But four key elements have guided our approach so far and may be helpful to other business leaders facing similar risks and crises.

Scenario planning. Over the past year I've learned firsthand why it's so important to always be prepared for the worst. When we began putting together our BCP, the idea of a full-blown Russian attack seemed far-fetched, but we still asked ourselves questions like "What will happen if employees have to relocate quickly? If electricity becomes unreliable? If bombings make Lviv uninhabitable?" Then we developed contingency plans and conducted

The true task of leadership is to support your customers and employees even when you're uncertain and afraid yourself.

informational sessions and trainings. For example, to address the risk of Russian cyberattacks, we took steps to further secure our customers' data and our own cloud systems. To address risks related to hiring and retention, we earmarked funds for wages (to enable us to keep paying our team, on time and in full, for the duration of the war), invested in mental health support and burnout prevention, and expanded international hiring.

It's impossible to predict every scenario, and the resources you spend mitigating risks should be proportional to their likelihood and scale. I still find myself worrying about very improbable events, such as nuclear war, a full collapse of the Ukrainian economy, or needing to move the entire team to another country. But by keeping many scenarios—from the most to the least likely—in mind and preparing for each as if it really could happen, leaders can position themselves for success in even the most trying times.

Flexibility. Of course, effective scenario planning requires a mindset that's flexible enough to adapt to whatever ultimately unfolds. In early 2022, for instance, we had set a growth target of 35% year over year. After the Russian invasion we decided to put that goal on hold temporarily and focus on adapting our business to the new reality.

We also shifted our hiring strategy to incorporate more international recruiting than we had initially planned, and we normalized flexible working hours throughout the organization. From the executive team to our junior employees, we were all ready to review our strategic and tactical decisions at any time, and we were comfortable adapting to changing circumstances as often as necessary.

Decisiveness. A decision not made today will cost twice as much tomorrow. The war has forced me and my team to make countless tough calls, and I've learned not to put them off. Sometimes the costs of procrastination are quite literal: Those who bought backup generators before Russia began to target Ukraine's power infrastructure got them for a third the price paid by those who waited just one or two months. As soon as the war began, we made the difficult and unpopular decision to freeze most salaries. If we had maintained our typical raise cycle longer, we would have burned too much cash to make the investments we eventually needed in generators, relocation support, and other expenses.

Leisurely, consensus-driven decision-making is a luxury of peacetime. In times of crisis leaders must invite input and collaboration but will ultimately have to make (and stick to) the right choice for the team, the business, and the country.

Support through uncertainty. Finally, the true task of leadership is to support your customers and employees even when you're uncertain and afraid yourself. That starts with remembering Maslow's hierarchy of needs: Safety is second only to physiological needs. When the war broke out, my team and I were singularly focused on that.

Empathy and emotional intelligence also became more necessary than ever before for building trust and ensuring productive long-term relationships through a difficult time. It's important to remember that this crisis has had a different effect on everyone, so rather than assume that our employees or clients are going through the same thing I am, I always aim to understand their experiences, challenges, and perspectives.

In addition, the uncertainty of war can lead to stress, panic, and disengagement. Leaders can address those risks by helping to resolve internal conflicts, communicating transparently but avoiding unnecessary fearmongering, and taking steps to keep employees motivated and aligned. Every Ukrainian has faced hardship over the past year, and I've had moments of feeling overcome by uncertainty, anger, and fear. But my team and I have a responsibility to support our people and our country—and we remain committed to that no matter what.

I STILL HAVE a lot to learn about being a leader. But if nothing else, I try to do something I can be proud of every day, whether it's donating hard-to-find imaging equipment to the army, mentoring young entrepreneurs in the local start-up community, or organizing charity events. Judging from my experience with the pandemic and with the war, I think it takes a business about three months to adapt to a new, previously unthinkable situation. So if someone asked me today whether they should start a business in Ukraine, I'd say why not? Despite all the challenges and heartache wrought by the war, the country continues to function, businesses continue to grow, and people continue to be inspiring.

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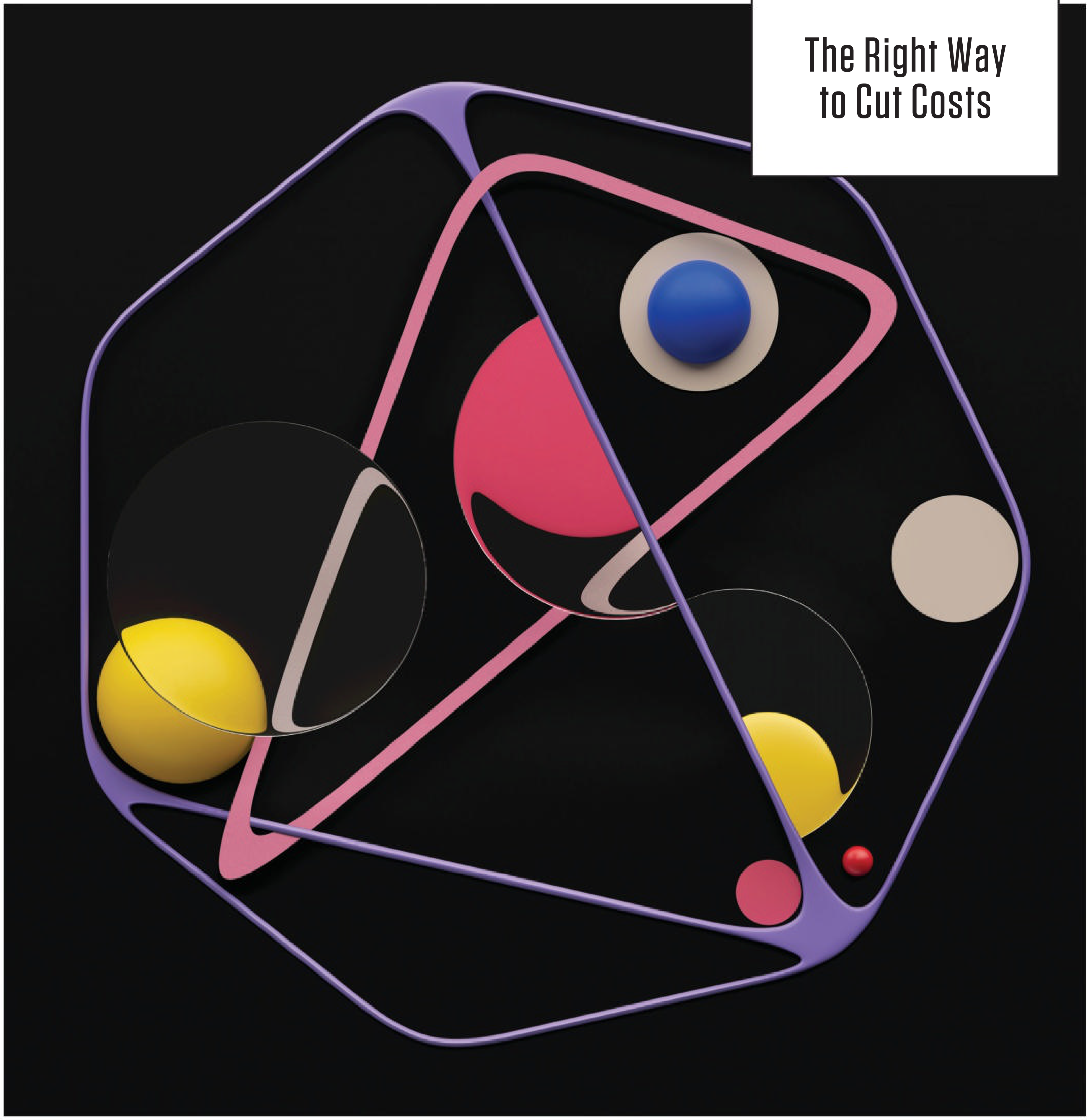

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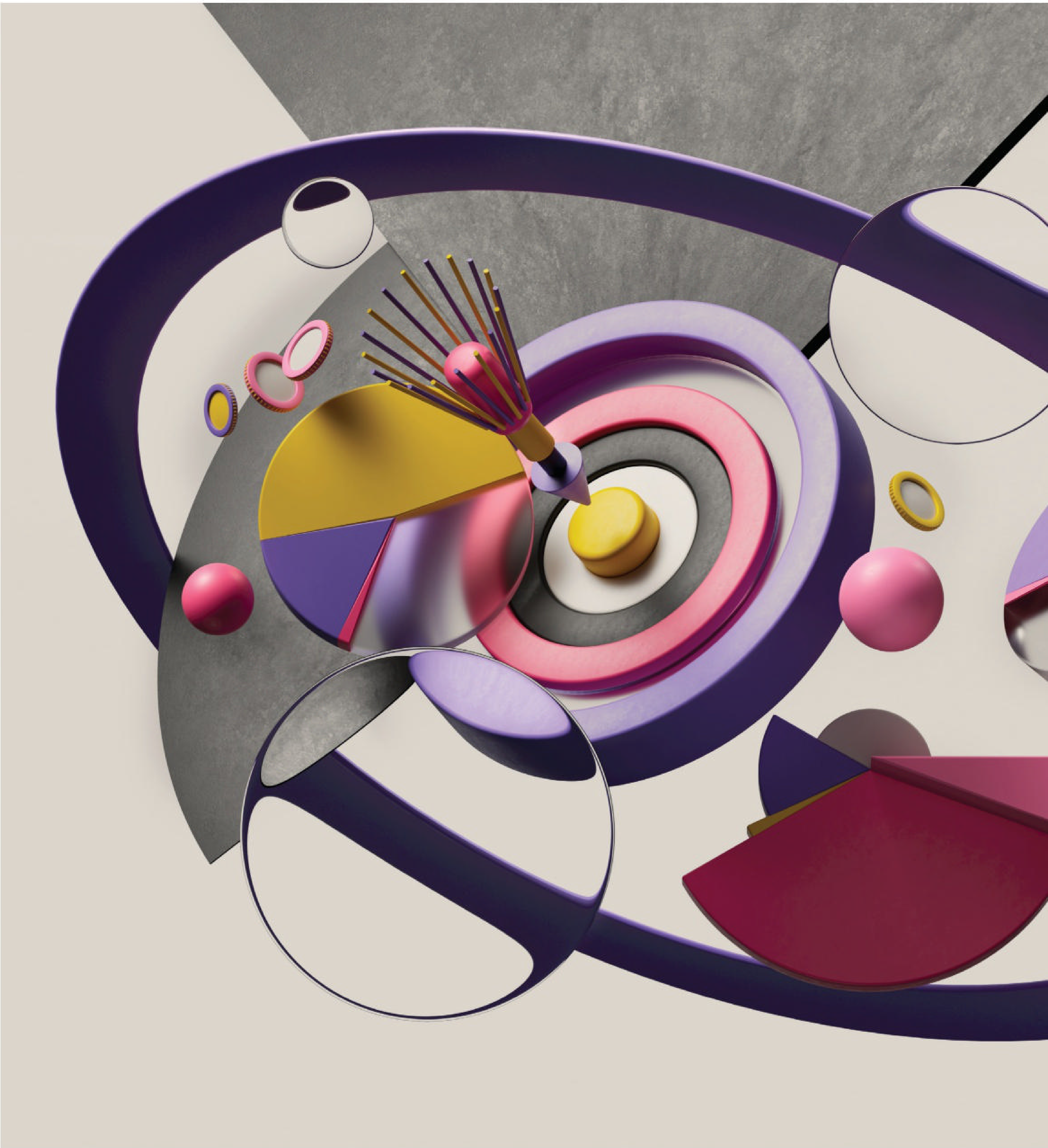

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Spotlight

Investing in Growth Through Uncertainty

Smart leaders embrace opportunities even as they reduce spending.

IN EARLY 2020 the pandemic plunged the airline industry into crisis, as passenger traffic on U.S. carriers plummeted 96% on a year-over-year basis. Like many of its peers, Alaska Airlines responded by quickly moving to stabilize its finances. It implemented a hiring freeze, cut senior managers' salaries, renegotiated payment terms with vendors, suspended stock repurchases and dividend payments, and reduced capital spending. But the company also did something that set it apart. As competitors canceled airplane orders, Alaska Airlines' leaders spotted an opportunity to update and expand the company's fleet at attractive prices while streamlining operations by shifting from a mix of Airbus and Boeing aircraft to only Boeing. Confident that its balance sheet was strong, the company announced in December 2020 that it had agreed to buy 68 Boeing planes, with an option to buy 52 more. It was the only major U.S. airline to place a large aircraft order that year. "We wanted to be aggressive to enable our recovery coming out of the huge challenges of the pandemic," then-president and current CEO Ben Minicucci explains. "We knew supply chain issues would hamper airplane deliveries, but this deal would put us first in line and set us up nicely to expand." After all, "you can't grow in this business without airplanes."

As the industry slowly recovered in 2021 and 2022, Minicucci and his team

> True resilience involves more than recovering from or resisting the effects of adversity. It is the ability to emerge *even stronger.*

doubled down, exercising the options on the 52 aircraft and locking in options on an additional 105 to meet its growth needs through 2030. Alaska Airlines also secured its talent pool by completing five labor deals in 2022, including one with its pilots' union. By early 2023 it was clear that this strategy of playing both offense and defense through the downturn had begun to pay off. The company, which was already one of the most profitable U.S. airlines and highly rated for customer service, sustained its performance on both measures. On a pretax basis, Alaska Airlines logged one of the highest profit margins in the industry in 2022, and Minicucci and his team forecast that its revenues would grow 4% to 8% a year through 2025, matching or exceeding the industry norm. The company also was named the Air Transport World Airline of the Year, won an APEX Passenger Choice Award for best airline, and landed on *Newsweek*'s America's Best Customer Service list.

When faced with disruptions and downturns, many leaders and companies instinctively focus on cutting costs to maintain profitability. But some, like Minicucci and Alaska Airlines, use the period of uncertainty to identify opportunities and then take thoughtful action to seize them. They realize that true resilience involves more than recovering from or resisting the effects of adversity. It is the ability to emerge *even stronger*. This requires both pressure-testing your firm's operational and financial health (its P&L and balance sheet) in worst-case scenarios and staying alert for measures you might take, even amid chaos, to find a winning edge.

Unfortunately, research that my colleagues and I conducted in the late 2000s suggests that very few leaders manage to foster this more aspirational form of resilience. Studying the strategies employed by nearly 5,000 companies before, during, and after recessions in the 1980s, 1990s, and early 2000s, we found that only 9% used those periods to fuel sales and profit growth through improved operating efficiency (rather than simple budget and workforce cuts) and strategic investments in market development and new assets. (See "Roaring Out of Recession," HBR, March 2010.) Multiple follow-up studies by consulting firms have reaffirmed the notion that unfavorable market conditions separate winners from losers, giving resilient firms a long-term advantage. But like my own work, this research has been largely limited to strategy and tactics. It doesn't explore the mindsets that allow leaders to embrace both protective and prospective strategies at once.

Psychologists will tell you that most of us have a natural orientation toward either offense or defense—playing to win or playing not to lose. Our personalities are either bold, striving, and "promotion focused" or conservative, cautious, and "prevention focused." Still, adversity accompanied by uncertainty typically triggers fear and defensiveness in everyone. As Mark Wiedman, the head of global client business at the investment management firm BlackRock, noted in early 2023, a crisis tends to put corporate executives into "panic mode—and they don't really feel like leading, leaning into something fresh and new."

However, more-recent research of mine reveals that organizations can overcome this defensiveness by fostering three key mindsets: sensemaking, a bootstrap ethic, and a commitment to stakeholder balance. While I focused on U.S. companies for this study, the lessons apply worldwide. Leaders who embrace these ways of thinking manage to chart a course for the future even when the outlook is darkest.

IDEA IN BRIEF

THE PROBLEM

When faced with industry disruptions and downturns, many leaders and companies instinctively focus on cutting costs to maintain profitability. But that is shortsighted.

THE SOLUTION

A better approach is to use the period of uncertainty to make smart reductions in certain areas while also investing in new capabilities that will allow you to emerge stronger. Research shows that the organizations that pursue this strategy gain a long-term advantage.

THE ADVICE

To play both defense and offense simultaneously, leaders need to adopt three mindsets: sensemaking (taking small steps to understand the environment and adjusting as you go); a bootstrap ethic (spending money where it counts while scrimping where it doesn't); and a commitment to stakeholder balance (working with employees, suppliers, investors, and communities to spread out the pain and ensure a collective upside).

Sensemaking in a Crisis

The organizational psychologist Karl Weick tells a famous story, perhaps apocryphal, of a group of soldiers who get lost in the mountains for several days during a blizzard. Eventually, one of them finds a map, which rallies their spirits and helps them make their way back to their base. Only later do they realize that the map depicts an area that's entirely different from the one they were in. The moral of the story, per Weick: "When you're lost, any old map will do."

The map served the soldiers not because it provided them with a reliable path to safety but because it emboldened them to take action. Difficult circumstances can feel paralyzing, but we don't need to wait until we've figured everything out to move forward. Indeed, taking that first step into uncertain conditions is how we begin the process of sensemaking—which helps us understand ambiguous or confusing issues and events. As the soldiers started walking, they oriented themselves in the snowy terrain and adapted their route accordingly. Resilient companies and leaders do the same, favoring action over inaction, especially in times of crisis. They define their ultimate goals and then make thoughtful initial moves, adjusting and pivoting when necessary to ensure that they stay on the right path.

In the mid-2010s, Edward Jones, a leading U.S. financial services firm, saw trouble ahead. Its customer base was aging, and its traditional model—advisers selling investment products to serious, long-term investors—was threatened by digital competitors that offered easier, less-expensive access to financial markets. Surveys showed that industrywide, consumers were underwhelmed by the financial advice they were getting. Most of it provided narrow guidance about products rather than more-comprehensive wealth management.

In 2019, Edward Jones embarked on a radical, multiyear transformation toward "human-centered complete wealth management." Advisers would develop a more expansive understanding of their clients that extended beyond their financial needs, and the company would invest in systems, processes, talent, and training to offer a wider range of products, services, and experiences. Soon after this initiative began, however, the pandemic hit, making the capital markets more volatile. Still, Edward Jones pressed forward, allowing investments in its transformation to outpace revenue growth.

In late 2022 and early 2023, as the economic outlook seemed to darken, the firm's leaders again wondered whether they should pause their efforts and reallocate resources to bolstering short-term performance. But while its peers were cutting costs and jobs, Edward Jones stayed committed to increasing its long-term value. CEO Penny Pennington explained that she thought it would be riskier not to invest in the future. The company did so in a more measured way, however, taking a step-by-step approach while continuing to monitor and decipher economic conditions. Without wavering on the end goal, leaders modified their plans to get there. For example, they postponed the hiring of 1,000 associates but ramped up financial planning and analysis capabilities to ensure that there was a good case for all new investments as well as metrics for evaluating their success. They also prioritized projects that offered higher potential value than others did—for instance, choosing to upgrade the IT system of the fixed-income business before the system of the equity business.

Combining a long-term perspective with an action orientation enables leaders to respond to a crisis by adapting, improving on, and adding to investment plans rather than abandoning them. “We invest when times are good, and we invest when times are hard,” says Pennington. Indeed, Edward Jones has proceeded with strategic investments in technology that allowed its more than 50,000 employees to work flexibly and virtually, in a new holistic financial-planning credentialing program, and in the development of a new charitable-giving platform for clients, all of which will help the firm attract talent and serve clients better in the years ahead.

An Ethic of Bootstrapping

The most common form of human stupidity, the philosopher Friedrich Nietzsche observed, is forgetting what one is trying to do. Sadly, adversity often leads panicked executives to do just that. In their quest for lower-cost operations, they destroy their companies’ prospects—falling into what some have called an “efficiency trap” or a “death spiral.”

A better approach when cost cutting is to consider the effectiveness of operations. This is a subtle but important mindset shift. It’s not enough to squeeze out as much as you can with the least amount of waste. You must still create the products, services, and internal processes that will lead you to your desired goals. As Peter Drucker remarked, “Efficiency is concerned with doing things right; effectiveness is doing the right things.”

Resilient organizations pursue efficiency in tandem with effectiveness by adopting the bootstrap mentality often seen at successful early-stage startups. On one hand, savvy new ventures obsessively seek to deliver new forms of customer value. On the other, they show a deep frugality born of limited resources. Their intense customer focus actually serves as a lens for leaders’ decision-making. They constantly ask, Does a given program, team, or product line make us more effective at serving our targeted audience? If the answer is yes, they retain and invest in it. If the answer is no, they cut it to realize cost savings.

The U.S. digital media company Firefly, which installs advertising displays on top of cabs and ride-share vehicles, saw its revenues drop to almost zero when the pandemic struck, as orders to stay at home reduced the utility of outdoor marketing. As the firm burned through cash, its cofounder and CEO, Kaan Gunay, decided to take two steps: first, reduce the head count of his sales, marketing, and sales support teams; and second, implement a 20% pay cut across the organization. He also renegotiated contracts with Firefly’s partner cab fleets and drivers and found other ways to reduce back-office costs that wouldn’t compromise the value delivered to customers. One solution was to relocate operations and engineering to Turkey, where the company could find less-expensive but still top-notch talent.

With the money saved, Gunay was able to bring in a highly experienced chief revenue officer who could accelerate growth when the market recovered.

The Challenges of Playing Offense and Defense at Once

My research identified three key kinds of challenges that often prevent leaders from preparing their companies to roar out of a recession.

Organizational. A dual approach requires firms to both add to organizations and subtract from them. The reallocation of budgets can lead to internal pushback and strife, making this approach hard to pull off. Adopting a customer focus can help resolve this tension because it provides a clear basis for making the right mix of efficiency improvements and new investments.

Cultural. Resilient leaders and teams tend to adopt a more aggressive mindset of playing to win instead of simply playing not to lose. But that isn’t always easy to do, given the well-known psychological phenomenon of loss avoidance, which tends to preclude bold action. The solution here for leaders is to explicitly nurture bravery as a cultural value, adopting courageous behaviors as cultural norms and exemplifying those behaviors themselves.

Strategic. Playing offense and defense at once demands that leaders strike a balance not only among stakeholders but also between the firm’s short- and long-term interests. Operational efficiencies might yield immediate gains, but too much cutting could compromise long-term performance. Investments might yield long-term improvements but drag down short-term profits. Forming a coherent strategy that reconciles the two approaches—and then communicating that strategy—is hard. The solution here is to adopt an overarching purpose or business intent that gives decision-makers clear direction and helps them make painful trade-offs.

Resilient organizations pursue efficiency in tandem with effectiveness by adopting the bootstrap mentality often seen at successful early-stage start-ups.

He also continued to invest in engineering and product development so that those teams could build out new ad optimization, forecasting, and planning technologies that customers were demanding in 2021 and 2022. Taking advantage of low valuations driven by market pessimism, Firefly also made acquisitions in the United States in 2021 and the United Kingdom in 2022 to expand into new geographies, further positioning the business for success.

Another example of the bootstrap ethic—at a much larger company—comes from Niren Chaudhary, the CEO of the U.S. fast-casual dining chain Panera Bread, which has faced a perfect storm of slowing sales, labor shortages, and rising supply costs in the restaurant industry over the past few years. With employee turnover high, especially among store managers, Chaudhary realized that talent was one place in which he needed to invest, not cut back, to preserve the customer experience. So he made several big moves: dramatically increasing baseline pay, adding learning and development opportunities for managers, and tying more of their compensation to store performance so that the best among them could earn six-figure salaries. To pay for those initiatives, Panera increased menu prices by more than inflation while stimulating demand with new products, such as flatbread pizzas, and promotions for increasingly price-conscious customers, such as a Sip Club offering unlimited drinks for $10.99 a month and low-priced combo deals. As a result last year Panera outpaced industry revenue growth, gained market share, and decreased employee turnover by 10%.

Balancing Stakeholders' Interests

My late colleague Sumantra Ghoshal, the founding dean of the Indian School of Business in Hyderabad and a professor at London Business School, used to say that the best leaders are like Chinese chefs because they know how to cook sweet and sour—that is, they know how to attend to stakeholders with completely different desires. Achieving such balance is hard in good times, but it can become especially vexing in a crisis. As fears of scarcity intensify, internal and external groups can become tribal, deeply protective of their own interests, and resistant to change, making both cost cutting and investing for growth more difficult.

Left unchecked, this phenomenon can lead to timid, unimaginative, and shortsighted decision-making. But leaders at resilient companies lean into tensions among stakeholders, challenging themselves to serve conflicting interests as best they can with creative trade-offs—an approach I've termed *practical idealism*. It means working with employees, suppliers, partners, investors, and local communities to devise solutions that might extract short-term concessions from some groups but limit the pain they feel while also addressing broader, long-term needs.

This is what leaders at the U.S. clothing company Levi Strauss had to do in 2020 when Covid forced shutdowns of their stores and manufacturing facilities. Sales also slumped because many potential customers, stuck at home, never got out of their sweatpants. The company stabilized its short-term financial position by suspending dividend payments and cutting 15% of its workforce, generating $100 million in savings. But it also offered extended health benefits to departing workers and additional benefits for those who remained. Further, it supplied vendors with nearly $2 million in grants and helped them secure other financing. And it maintained its sustainability programs because, as its CFO, Harmit Singh, explains, "You can't say, 'I'm going to do it today and forget about it tomorrow now that a recession or slowdown is coming.'"

Yes, Levi Strauss could have saved more money by reducing employee, supplier, and sustainability expenses, but leaders understood that over time those investments would position the company to improve outcomes for all stakeholders. Even investors, Singh says, "now seem to believe that a diverse organization, a more equitable organization, a more inclusive organization, is better for the long term, which makes it critical to stay true to your causes and your strategy during hard times. There is no right answer, no formula, and I'm sure people can poke holes in what we've done. But if I can sleep well at night, then I think we're in a good spot."

Pennington at Edward Jones also explicitly focused on "fiscal balance" among three key stakeholder groups: clients, colleagues, and community. This year, even as the firm has tightened spending, it has kept investing in the new tools and services that will help customers, paying advisers bonuses (albeit reduced), and funneling tens of millions of dollars into "financial fitness" programs for high school students.

Spotlight

TOO MANY LEADERS allow deep-seated fear to control their companies' responses to adversity. They huddle in their corners, afraid to make a move beyond slashing costs and forbidding new investments. They focus on increasing the efficiency of their operations without investigating whether doing so will make their organizations more effective at generating customer value. They prioritize certain stakeholders and fixate on short-term results.

Resilient leaders, by contrast, calmly appraise the challenges they face in times of crisis, taking defensive steps while also launching offensive action. They continue toward their goals but pivot quickly as more information becomes available. They operate with a bootstrap ethic—investing where it makes sense but staying ruthlessly frugal everywhere else. And they balance the needs of all their stakeholders, over the short and long terms, for the best results.

As the ancient Stoic philosophers knew, adversity isn't simply a threat to be contained but a unique opportunity for individual and organizational growth. And that raises a crucial question (borrowed from a popular saying by the writer Vivian Greene): Would you rather hunker down and wait for the storm to run its course or learn to dance in the rain?

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Cost Cutting That Makes You Stronger

How the most resilient companies position themselves to grow

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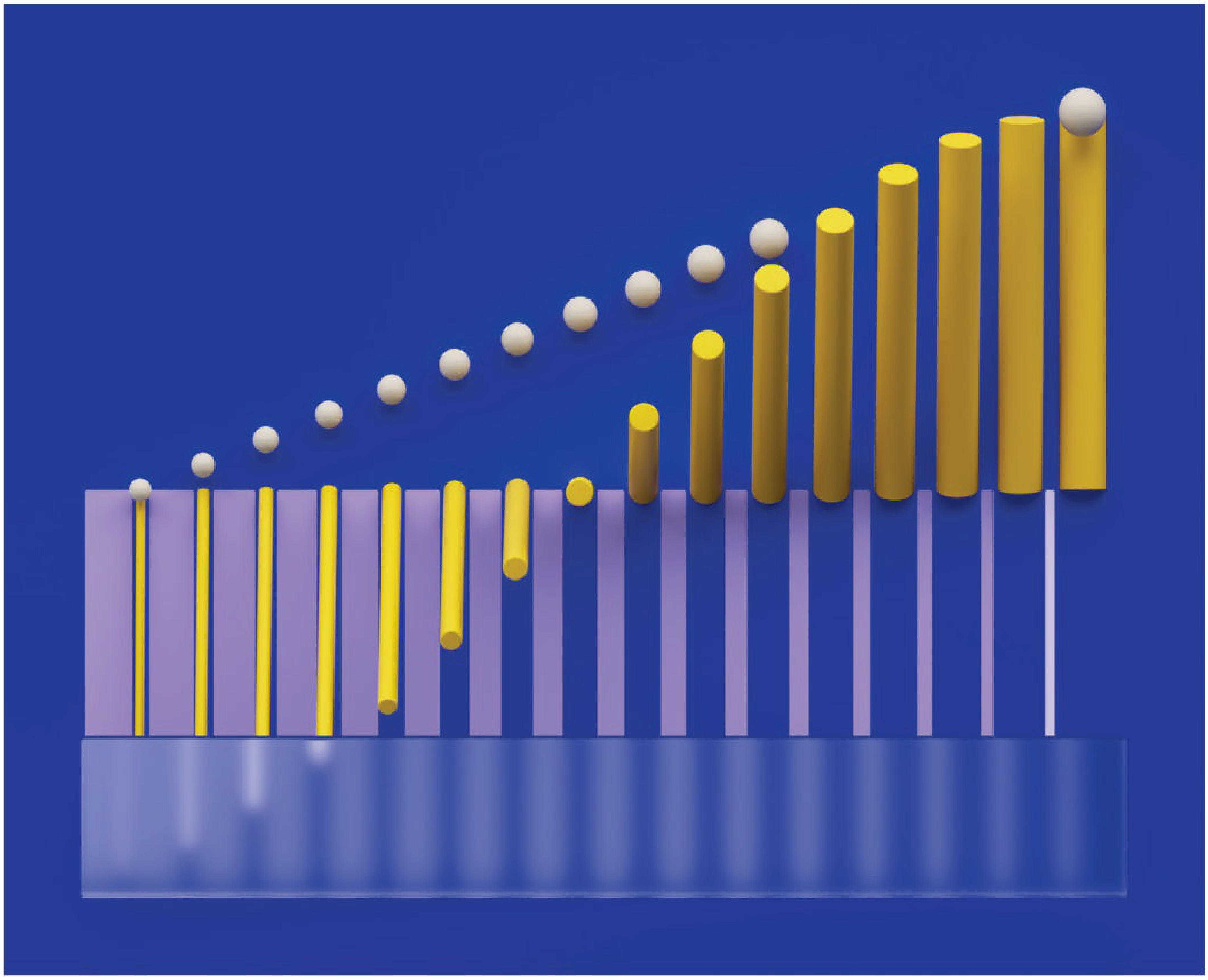
IN TIMES OF economic uncertainty, many leaders turn to an old standby: cost cutting. When so much in the world feels beyond our control, costs are, to a large extent, controllable. But cutting costs with the singular goal of realizing short-term savings is myopic. Whether they're faced with an urgent need or not, leaders should view each expense line as a precious investment in the business—and recognize how the decision to increase, decrease, or maintain it will shape the company's future.

Danaher, a global diversified conglomerate based in Washington, DC, is a successful firm that sees costs as investments. Some are good, and some are bad. Danaher doesn't work to reduce costs; instead it tries to weed out poor investments while keeping the good ones—day in and day out, during both booms and busts.

A key element of its approach involves applying something it calls the Danaher Business System to the steady stream of companies it buys. The system draws on lessons from Danaher's broad portfolio of businesses—repeatedly—to make operations ever more efficient. "Most managers have a mindset that if you apply a tool once, you're done," recalls George Koenigsaecker, who implemented the first version of the system in the 1980s as the president of Danaher's tool group. Koenigsaecker, now an investor and an expert on lean manufacturing, says a single application of a process improvement might yield a 40% gain in productivity. "But



to get the 400% gain, you have to use it at least 10 different times," he notes. "You must study the process over and over." At Danaher the drive toward efficiency is relentless, and cultural reminders of it are everywhere. In meetings, for example, executives often ask if the meeting really needs to run as long as it has been scheduled for. The mantra is "Waste nothing."

Many companies, in contrast, take a one-off approach to cost cutting and do it reactively when it's the only obvious option for reaching profit targets. Unfortunately, in their hurry to eliminate things that seem discretionary, they often sacrifice some of their most important investments.

Such risk has been growing lately. In a PwC survey conducted in November 2022, 42% of senior executives said that cost cutting would be a priority in 2023—a prediction borne out by the waves of layoffs making headlines during the first half of the year. When cost-cutting programs are implemented in haste, as many of the current ones have been, there is little (if any) debate over the strategic intent behind spending. Typically, leaders dole out across-the-board targets, leaving functional groups and line managers to quickly figure out what (or who) must go. That winds up leaving organizations weaker, imbalanced, and in some cases desperate and without direction.

To learn more about how companies have successfully managed costs while still achieving growth, we did a study of the 1,500 largest global public companies, based on 2021 revenue. (Our colleague Harsha Kasturirangan, a director at Strategy&, helped us with this research.) Among that group we identified 201 companies (or 13% of the sample) that from 2015 to 2018 implemented what we call a *cost transformation:* achieving EBITDA above the

> One way to get a better perspective is to imagine a new competitor arriving in your segment without the burden of all your past decisions. How would it compete?

industry median while experiencing revenue growth below the industry median. That separated companies that grew their margins through cost reduction from those that grew them through top-line improvements. Then we analyzed those 201 firms' financial results in the three-year period ending in 2021. Of those companies, 125 (62%) delivered below-market revenue growth and profitability. Their revenue remained relatively flat, dipping 0.6%, on average, and their EBITDA dropped by 8.3%. Despite their earlier margin improvements, their efforts ultimately weren't successful, because they'd undermined their future results.

The good news is that 76 of those 201 companies (which included Danaher) experienced higher revenue growth and profit margins in the following three-year period. On average, their revenues rose by 16.8% and their EBITDA by 6.8%. These companies represented a wide range of industries—including technology, industrials, pharmaceuticals, and financial services—with no single industry accounting for more than 11 companies. They were also widely distributed geographically, headquartered in 19 countries across North and South America, Europe, Asia, and Australia.

These 76 companies clearly had set themselves up for future success. The question was: What did they get right that the others got wrong?

Creating a Growth-Oriented, Cost-Effective Organization

To succeed at cost transformation, you need to start with a blank sheet and ignore sunk costs. This is the mindset underlying zero-based budgeting as well as Peter Drucker's famous question "If you weren't already in this business, would you enter it today?" Applying this lens to every project, line item, and role allows leaders to look at the cost structure strategically, which is imperative, because there may be no topic more strategic than where you spend your money.

But simply challenging every line item isn't enough in our analysis—and on its own may feel like a disjointed and endless effort. We believe you also need to take five critical steps.

Connect costs to outcomes. Treat every dollar spent as an investment in creating the value that you give your customers and in the specific cross-functional capabilities needed to deliver that value. Costs should no longer be locked inside organizational silos that get protected and thus are disconnected from growth. Budgets must be discussed in depth with the leadership team and prioritized to focus on what truly supports your strategic goals and the capabilities that will help you achieve them.

A great example is IKEA. The company has long been guided by a succinct principle that makes this promise to customers: "We do our part. You do your part. Together we save money." After opening his first retail store, in 1958, the company's founder, Ingvar Kamprad (the I and K of IKEA), drove employees to pursue any cost-saving opportunity that didn't affect the quality of the merchandise, the customer experience, or the efficiency of operations—a practice that continues to this day. IKEA's designers, for instance, work continually on packaging to reduce its materials and size so that the company can fit more pieces into a container, save money, and offer lower prices. That congruence between strategy and execution is rare in product design. In many companies products are designed by people who aren't responsible for managing expenses. But IKEA connects its design to all the outcomes for the customer, including cost. If you visit the company, its cost consciousness is apparent. For example, executives almost always take guests—even VIPs—to eat in IKEA cafeterias rather than fancy restaurants, to avoid any expense that might be passed on to customers.

Simplify radically. Companies often take their activities for granted and make incremental adjustments rather than take a bold, holistic look at what businesses, product lines, SKUs, or operations should be part of their future. Most also underestimate the cost of complexity, measuring only direct costs rather than system costs. One way to get a better perspective is to imagine a new competitor arriving in your segment without the burden of all your past decisions. How would it compete? What products, activities, solutions, and services would it create? How would it simplify the customer offering to create the highest value?

The Dutch company Philips had a storied history in, among other things, lighting and personal electronics, but in the mid-2010s it decided to concentrate on health care and divest, spin off, or sell every other kind of business. Philips knew that to succeed it needed to focus management's attention solely on health care. With this tremendous simplification came new investments in the capabilities that supported a much bolder health care strategy—which led to major innovations in health products and services.

Reimagine value chains digitally, in rapid sprints. Yes, automation offers great potential—but not when it's held hostage to big, drawn-out technology programs. Companies can realize the benefits of digitization by rethinking entire processes end to end, but they'll capture much greater near-term gains when they put automation on top of—or in the place of—existing tools. To manage such efforts, some companies build "digital factories," capability areas that are responsible for the rapid and continual rollout of automation across the entire organization. These "factories" dramatically streamline the process by following an established playbook. They also allow companies to evaluate all automation investments holistically. While you may question how you could afford one at a time of intense cost-reduction focus, we have seen that they can not only pay for themselves but also generate enough savings to fund other cost and growth initiatives.

When the executives at one of our clients, a global food and beverage company, embarked on an enterprise resource planning (ERP) modernization program that was scheduled to last several years, they quickly realized that the cost improvements needed were so significant that the company couldn't wait that long to realize them. They created a digital factory team that brought together people with experience in automation design, development, adoption, and maintenance and tasked them with reimagining manual, costly, and time-consuming processes (such as the procurement-to-accounts-payable cycle and HR practices from hiring through retirement). The team's solutions captured savings within the current ERP platform while reshaping processes in preparation for the improved automation and insights the new system would enable.

Rethink what work you and your ecosystem take on. Creating powerful new capabilities isn't cheap; a lot of technology, data, and people are involved. Smart companies recognize what has to be truly differentiated—and then think about who can deliver it best. Your ecosystem of partners probably has much greater scale in some areas than you have on your own. Outsourcing nondifferentiating capabilities or even elements of your most important capabilities can allow you to focus your investment where it matters.

What a company must do today is much more complex than it was just a decade ago. The traditional marketer, for instance, was a generalist who could manage a great variety of activities. But now marketing requires specialized expertise in many areas, such as social media, ethnographic research, data science, and content curation. Having all that know-how on staff is not only expensive but requires a talent model that accommodates career paths and skill development in a multitude of areas. Outside agencies can offer an easier way to access scale with such capabilities and often a more dynamic career track for specialized talent.

In the early 2000s, Apple realized that manufacturing was neither core to its strategy nor a historic strength. As a result it rapidly moved nearly all manufacturing of components and finished products to its ecosystem partners. That freed the company up to pursue even greater innovation in materials and design and to further integrate data and devices across its various offerings, strengthening its overall product differentiation.

Build a sustaining, cost-focused management system. Smart companies don't think of cost cutting as a onetime reaction to a slowing economy; they believe it's a primary duty of managers to remain constantly vigilant about costs. But that attitude is unusual. Too many companies downsize during periods of economic stress, only to turn around and increase selling, general, and administrative expenses in subsequent years—without seeming to understand this pattern.

Budgets are a real test of how your company thinks about costs. If yours tend to get adjusted incrementally through function-by-function agendas, you're probably not actively—or strategically—managing them. But if your budgets are zero-based and allocated and evaluated across functions, focusing on the most critical and differentiated capabilities, you're creating a culture and a process for managing cost.

HP took the right approach in 2019. Although the global economy was strong at the time, the iconic provider of computer and printer products and services had begun feeling headwinds from increased competition and commoditization. In response it embarked on a cost transformation that radically simplified its product portfolio, eliminated an entire organization layer to get closer to customers, and centralized R&D. In addition, HP optimized its real estate footprint, creating more-efficient digital workspaces as it moved to a hybrid work model. It also built a new digital backbone: an ERP system that allowed it to deploy additional tools and capabilities. Those carefully considered moves cut more than $1.3 billion in annual costs. Those savings enabled HP to make important investments in both R&D and acquisitions that positioned the company to weather significant volatility in its sector.

HP is now aiming to achieve $1.4 billion more in annual savings by reducing complexity and costs in its mature businesses and simplifying its operating model. A substantial portion of that money will be reinvested in its Future Ready initiatives, which seek to drive growth through innovation. HP's chief financial officer, Marie Myers, notes that these changes often require "hard choices" but believes they will allow the company to keep delivering cutting-edge offerings to its customers.

Getting Started

Enterprise cost transformations are challenging to pull off. They require major changes in technology, operating models, ways of working, and other parts of a company's DNA. That kind of change has always been difficult to implement, but in the past decade constant firefighting and increased pressure to perform have made it even harder.

To link costs to their strategy and avoid hastily made cyclical cuts that leave them weaker, companies should do the following:

Align the top. A strategic transformation cannot be delegated. The board, the CEO, and the executive team must all be committed to taking the steps necessary to achieve the goals that have been articulated. The more revolutionary the change, the more likely those with power under the status quo are to resist it. Some members of the incumbent management team may lack the capabilities, mindset, and willpower to execute the program. For that reason one of the early actions in any transformation should be facilitating those executives' alignment—or departure—swiftly and discreetly.

Build confidence through accelerators. Early wins create momentum, focus the organization, and help convince employees that change is possible. Initiatives to capture them—which often involve quickly shuttering projects that aren't showing results or are no longer strategic—should close performance gaps in a few critical areas, reduce costs, and free up money to fuel longer-term initiatives. If they show a positive impact on profit and cash flow from day one, they'll set up the transformation to be self-funding. Other immediate opportunities include cutting unnecessary roles, applying digital automation to cumbersome tasks, and reducing spending on external contractors.

Aim for a two-year journey. Investors and analysts are increasingly skeptical of transformation efforts that extend beyond 24 months, especially since those that promise to deliver most benefits on the back end often fall short. Organizations also get fatigued when they have to endure repeated and invasive changes for multiple years.

So it's important for a cost transformation effort to deliver results in the short, medium, and long terms. Think of it as having three chapters. Chapter One: Launch initiatives to rightsize costs without relying on technology, freeing up cash to invest in what really matters. Chapter Two: Activate more-complex initiatives that involve moving work across geographical boundaries or automating large swaths of processes using ERP or advanced digital technologies. Chapter Three: Ensure that you have built a continuous cost-management process and are investing in new products, platforms, and capabilities that will give you a fundamental advantage.

Build a dedicated infrastructure for change. Revamping the business while running it is a juggling act. The company will need a chief transformation officer, who should focus on aligning strategy and costs in every economic environment—and hold executives responsible for "performing" and "transforming," recognizing that doing both is critical. This new or enhanced C-level executive should be supported by a transformation office that structures workstreams, appoints project sponsors and leads, defines accountabilities, and drives results. That office must build trust by being authoritative and independent. It should serve as a single source of truth that provides verifiable data. It also should intervene when impediments must be overcome, major course corrections made, or diverse workstreams synced.

Enlist middle managers and frontline employees early. Because they

Executives need to demonstrate that they're "proud to be frugal" to dispel the common skepticism that cost reduction is something the top tells the middle to do to the bottom.

bridge the gap between the front line and senior leadership, midlevel managers are well positioned to contribute. Give them a voice in the process so that they feel invested in it. Let them offer their feedback, doubts, and ideas. Give them incentives to generate real innovation—perhaps even share the gains with them. Frontline employees, for their part, are best able to assess what expenses can be cut and what processes can be streamlined without compromising quality or client satisfaction. Our work with clients shows that frontline opinion leaders can promote broad-based support for cost-management efforts that is far stronger than what any corporate-sponsored effort can achieve.

Put your culture to work. Continual change becomes sustainable when your culture enables transformation rather than hinders it. The key is to focus on a few critical behaviors—ones that some people demonstrate regularly now and that would lead to tangible business improvements if everyone adopted them. Changing behaviors is difficult, and trying to change more than a handful at one time is impossible, but focusing all employees on a few eases them into a new way of thinking.

At one global food company all employees were asked to adopt three behaviors: speaking up when they saw evidence of waste anywhere and offering solutions to fix it; using self-service for their business needs wherever possible; and encouraging their teams to bring any backup materials to operating reviews and stick to the agenda. Those behaviors promoted cost consciousness even when nobody was watching and prompted employees to spend the company's money as if it were their own.

Build mechanisms for an ongoing focus on costs. The need to reallocate resources to your strategic capabilities and highest-growth businesses is constant. Financial systems should create more transparency around "good" costs—those associated with differentiating capabilities—and "bad" costs, which are required to keep the lights on and the business open. Give budget owners detailed information about cost drivers and help them develop a deeper understanding of the economics of decisions.

For example, one of our clients created a simple slide to show how one dollar of savings flowed through the system and resulted in stronger company performance. That let managers directly see how curbing unnecessary expenses translated into company results that benefited them personally. At IKEA an annual review of all costs—and prices—is part of an effort to live into the firm's stated purpose of saving customers money and ensure constant attention to cost management.

Leaders should hold individual functional and business unit owners accountable for achieving a step change in certain cost pools (such as SG&A, transportation, indirect spending, and cost of goods sold) in addition to traditional P&L targets. Executives must personally model cost-conscious behavior. They need to actively demonstrate that they're "proud to be frugal" to dispel the common skepticism that cost reduction is something that the top tells the middle to do to the bottom.

TODAY'S ECONOMY IS putting cost management front and center in boardrooms and on leadership teams. In addressing this issue, executives face a choice. They can cut costs the traditional way and risk making their organizations weaker, or they can do the hard work of rethinking the very basics of their business: identifying the bold outcomes that will differentiate the organization, simplifying every part of their operations, creating savings through automation, leveraging their ecosystem to take on activities they shouldn't be owning, and building cost management into everything they do.

You'll know you've made progress when costs aren't a negative topic owned by only a few, when your budget truly reflects strategic choices, and when your entire company appreciates how precious every investment is. At that point you won't just have found a better way to manage costs—you'll have found a way to transform your company and shape your future.

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Don’t Eliminate Your Middle Managers

In lean times they can help you thrive—if you reimagine their roles.

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IN RECENT MONTHS, amid signs that the economy might be softening, many companies announced layoffs aimed at curbing expenses, with middle management a common target. Cutting such jobs hastily or too deeply can be a costly mistake. Over the past several years of advising clients and researching workforce trends, we’ve seen that this vital organizational layer often gets severely depleted. The problem is, middle managers—positioned close to the ground but not too close—are essential to helping businesses navigate rapid, complex change. They can make work more meaningful, interesting, and productive, and true organizational transformation can occur only with their involvement. They’re the glue that holds teams and enterprises together, fostering the inclusion and psychological safety individuals and groups need to thrive.

If middle managers are to fulfill this promise, though, leaders must reimagine their roles and give them the training and support they need. Instead of eliminating them or relegating them to administrative and individual contributor work, companies should reassess their responsibilities, push to more fully understand their value, and then develop, coach, and inspire them to realize their potential as organizational linchpins.

All that may sound like a tall order, but leaders can’t afford *not* to take those steps, as we learned when we recently explored the economic impact of investing in the development of human capital—including the critical management layer. We studied HR data on 1,700 global companies—for example, figures on attrition, hours of training, and internal mobility. We also examined their McKinsey Organizational Health Index scores, which are based on an analysis of organizational performance outcomes (such as employee motivation and an inclusive work environment) and management practices (such as employee empowerment and bottom-up innovation). When we compared that information with the firms' financial results, we found that companies whose managers excelled on human capital metrics had high returns on invested capital (28%), were four times as likely as their peers were to have superior long-term financial performance, and experienced more sustained revenue growth during the pandemic.

Why Middle Managers Can Be Your MVPs

Many companies don't know how to make the most of their middle managers—the people at least one level away from both the front line and senior leadership. In survey after survey those managers report being mired in bureaucratic and individual contributor work. If freed from those demands, they can take the lead in several areas critical to the 21st-century workplace.

Responding to increasing automation. As algorithms and machines take over tasks from humans, companies will be engaged in what we call the *Great Rebundling:* finding ways to reconfigure employees' work. Although such redesigns may be broadly shaped at headquarters, the details can be defined and carried out only by those with firsthand knowledge of what happens on the ground. Smart organizations will deputize middle managers to pull apart and reassemble the pieces of affected jobs.

The world's largest private employer, Walmart, has recognized the importance of rebundling in the face of rapidly changing technologies and consumer preferences. Its Walmart Academy provides instruction and on-the-job coaching to prepare associates for supervisory positions, and its Live Better U program offers free classes and training in areas including cybersecurity, business administration, supply chain management, and logistics—all in anticipation of skills associates will need going forward. Building a strong managerial pipeline is essential, Lorraine Stomski, Walmart's senior vice president of enterprise leadership and learning, told Harvard Business School's Joseph Fuller in a podcast episode. The manager is "the person that believes in you—that sees you can do more than what you're doing," she explained.

Winning the war for talent. Research by our firm and others has found that people are looking for more than a good salary. They want to understand how a prospective job would fit into the organization's strategy and align with their personal purpose. They want to join a team that's caring, trustworthy, interesting, high performing, and fun. They want their employers to participate in their development, and they want more control over what they do and when and where they do it.

Middle managers can make a huge difference in a firm's ability to attract talent. They, far more than their higher-ups or their colleagues in HR, can craft individualized working arrangements that will enhance recruitment, retention, and diversity while facilitating high-value work. Consider the case of Julia, a highly qualified recent graduate who interviewed at two investment firms. David, the hiring manager at one, was shocked when she turned down his six-figure offer. He'd failed to perceive that the hiring process now involves more than an economic exchange, and he'd grown tongue-tied when asked about job sharing and whether the company had pledged to go carbon-neutral.

Julia went on to take a job with the second firm, which focused on environmental, social, and governance (ESG) investing. Karl, the manager who'd interviewed her there, had talked about the firm's values and priorities and whether they connected with her own. That kind of conversation can be driven only by someone operating near the ground level, where it's possible to understand both the company's purpose and that of each individual. Karl expressed his openness to remote and part-time work and sealed the deal by introducing Julia to his team, whose enthusiasm and commitment won her over.

As work becomes ever more dynamic, other hiring practices need to evolve. HR can ensure that policies are consistent, fair, and legal. But only managers understand their individual departments deeply enough to see gaps between old and new realities and identify which policies need to change. For example, do university degrees still make sense for particular roles, or are more-creative recruiting strategies called for? Managers and HR can work together to widen the hiring aperture and bring in new kinds of talent. In doing so they'll also be helping their firms meet diversity goals while leveling the playing field for historically disadvantaged groups.

Leading employee development. Middle managers can engage in a dialogue with HR about how the organization's people are overseen and developed. They know their team members better than anyone else does, so they're best equipped to provide continual coaching and to identify and address performance issues early on.

Bob, who worked in a support function at an ad agency, was knowledgeable about the industry and had creative ideas. But he had a habit of going off on tangents, making projects needlessly time-consuming and complex. Instead of dealing directly with this issue, Bob's manager encouraged him to make a lateral move. Fortunately, Bob's new manager, Aisha, took her job as a coach and career developer seriously. She communicated her expectations from the start and talked with Bob about more-effective ways to work. For instance, she pointed out that he could have solved a particular client problem with a single phone call rather than a group email, thus saving his time and others'. With Aisha's guidance, Bob became a valuable contributor and colleague.

Demonstrating purpose and compassion. The need to do this doesn't end once employees are hired. When workers feel meaning and a sense of belonging on a day-to-day basis, it elevates their satisfaction, commitment, and performance. The CEO can begin by crafting a compelling narrative about what the company stands for. But the continuing conversation requires skilled managers who can drill down to learn what each employee values, connect it to the bigger picture, and try to tailor each job to what people find to be their greatest inspiration. This is especially crucial in light of the pandemic. In an August 2020 McKinsey survey of U.S. employees, two-thirds said that Covid-19 had caused them to reexamine their personal purpose, and nearly half said they were considering changing jobs as a result.

Middle managers can make organizational goals relevant by exploring questions such as What is the work that needs to be done? and Why does that work matter? with their reports. They can be gifted storytellers and sensemakers. With many organizations having loosened their headquarters model in response to the pandemic, connecting employees to company goals has become more complex and critical than ever.

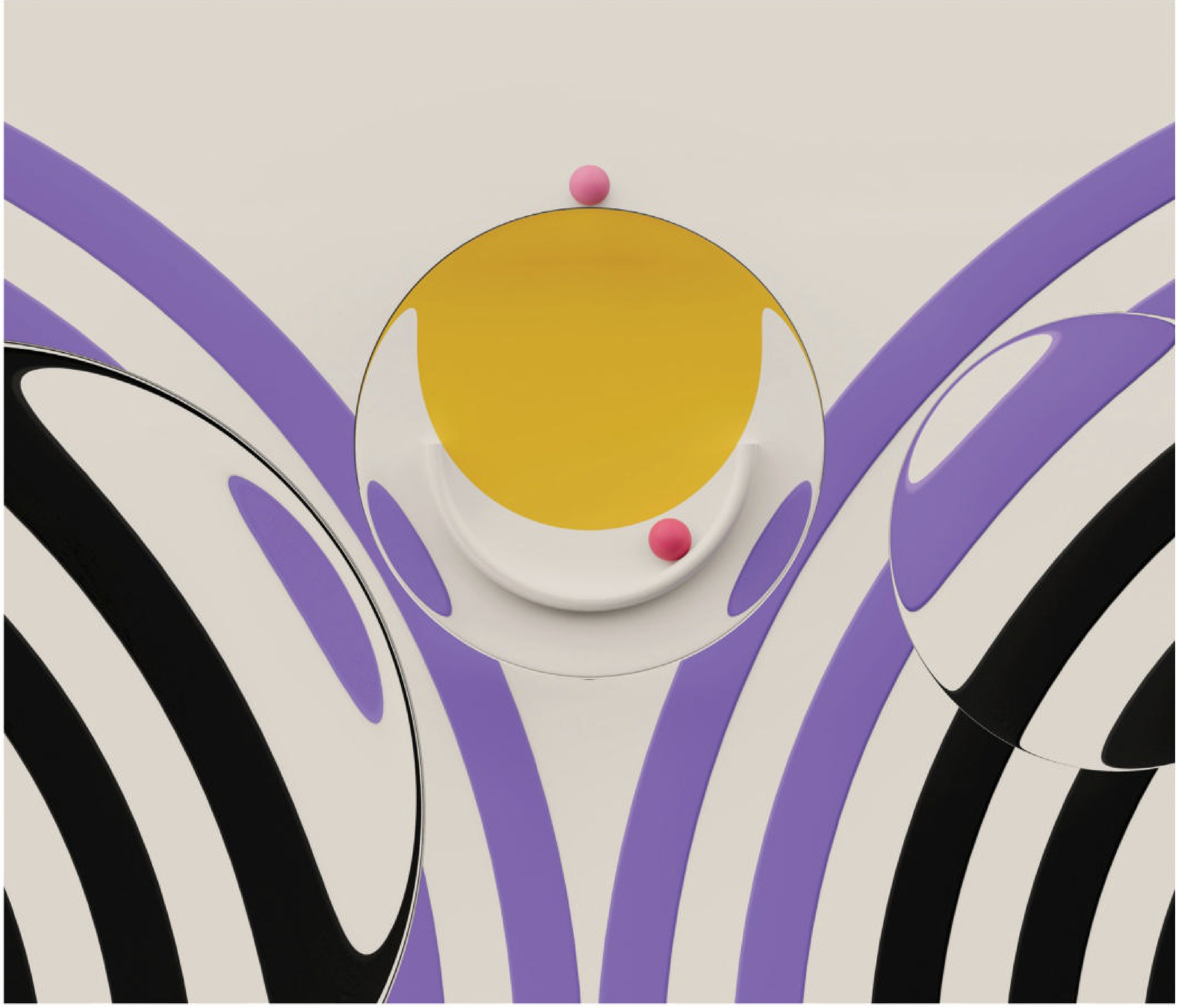
Just as important, skilled managers understand that their employees are people with rich, deep lives and show concern not just for their work but also for their hopes and dreams. Such managers recognize that if someone is underperforming, it's rarely because that individual doesn't care; it's usually because the job is a poor fit or because of personal pressures. When the former is the case, managers can scan the company horizon for something more suitable. When the latter is the culprit, they may be able to lighten the employee's load.

Checking in on team members' mental health is no longer a nice-to-have; it's a must-have. In a recent McKinsey Health Institute survey of 15,000 employees in 15 countries, 59% of respondents reported having at least one mental health challenge. One-on-one conversations are an ideal way to learn what employees are coping with, convey compassion, and offer concrete help. Middle managers who have them regularly with their reports can heighten employee loyalty and performance.

Making smart use of data. The neglect and misuse of data puts organizations at a serious disadvantage, especially in a volatile environment where the nature of work is rapidly changing. Many leaders complain that they've invested in expensive data technologies but seen few concrete results.

The difficulties often stem from a "last mile" issue: the challenge of making data understandable to employees who are in a position to use it and of giving them clear recommendations for its implementation. Some companies have assembled cross-functional data-science teams to wrangle, analyze, and disseminate information and help manage any new projects that result. Middle managers can play key roles on such teams by helping shape their analyses and organize their work. Because middle managers have the best understanding of how data is gathered and applied to day-to-day work, they're essential to ensuring that data-based activities don't perpetuate bias or impede performance.

But harnessing data doesn't have to involve complex technology. Simple employee surveys, for instance, can be an effective way to learn what people



want. Senior leaders should work with middle managers to ensure that the questions in them are thoughtfully designed; more than anyone else, managers know what factors are important to measure. They can translate results for those above and below them. And they can help create action plans that will yield tangible results.

What Senior Leaders Need to Do

Too many top executives fail to empower people to do the work they're uniquely suited to. Middle managers in particular have suffered as a result. In a recent McKinsey survey many of them reported spending nearly half their time on low-value administrative and individual contributor tasks. In interviews they say they lack their superiors' trust. Those things can induce a state of learned helplessness across the organization.

Much has been written about the need to set aside the old command-and-control style of leadership, reassess roles, and transfer more power down through the ranks. We can't emphasize that imperative enough. To be truly effective, managers need autonomy and flexibility. By removing the tasks that weigh them down—whether by automating or reassigning those tasks or eliminating them altogether—you can elevate their work and allow them to elevate the work of their reports. That means prioritizing trust over bureaucracy and discarding the popular "player-coach" model that has managers balancing two jobs instead of focusing on one.

Spotlight

By removing the tasks that weigh managers down, you can elevate their work and let them elevate their reports' work.

Begin the reassessment process by identifying the most critical managerial roles: those that will generate the greatest profit or involve the highest risk. Think carefully about whom to put in those positions according to the specific jobs to be done in them. Next pinpoint your most influential managers. You can do that by surveying employees about the people they turn to when they want to know what's going on and seeing which names come up repeatedly. Not all those people will hold important roles, so you should home in on what we call "the critical few," who are both influential and high value. You'll want to bring them into the tent when making important strategic decisions. Influencers who don't hold high-value positions can serve as megaphones. If you keep them informed and inspired, they can spread energy and excitement throughout the ranks.

Managers who are smart and innovative but not especially influential or well-connected can be encouraged to join networks that help them generate and share ideas and execute resulting plans. And managers who are not top-tier in terms of either influence or value can make a difference if you're thoughtful about deploying them. Putting them on critical projects or connecting them with more-influential colleagues may give them the motivation to shine.

When engaged in this reassessment, you may bump up against a hard reality: Some people aren't equipped for any of these roles. You can train many to be more effective or match them with a more appropriate team. Those who excelled as individual contributors can resume that role and be put on a promotional track in their area of expertise. Some may not be a good fit even with reshuffled assignments and additional training, and you may need to let those few managers go.

You'll also need to change how you evaluate your managers. Don't reward them simply according to the revenue and profit their departments produce; recognize those who have taken on tough assignments regardless of the revenue potential. Most crucially, reward managers for their most important job: managing. One executive we know devised a scorecard that uses traditional metrics but also accounts for team performance, diversity, attrition, the number of open team positions, the number of one-on-ones with reports, succession planning, and employee engagement. Whatever criteria you prioritize, be explicit about the behaviors you want to see.

As you work to reenergize your middle-management ranks, you should do the following:

- Ensure that your organization has a clear statement of purpose that aligns with the managers' purpose.
- Do all you can to keep good managers working as managers. Promote them within the managerial track, move them to high-value roles, and reward them with substantial pay increases that will keep them from looking for other jobs.
- Communicate that these are desirable roles—destinations, not way stations.
- Encourage managers to meet with one another and share best practices.
- Create a culture in which managers feel free to speak up. They're often the first to identify systemic problems and see solutions.
- Show your managers compassion, just as you expect them to show compassion to their reports.

Managers have some of the hardest jobs around. Surveys show that they're the most depressed and stressed category of worker. Keep that in mind and support them to the fullest.

IN TODAY'S WORLD of work, human capital is at least as important as financial capital. To survive and thrive, organizations must shift their mindset, recognizing not just that employees are a crucial asset but that those who recruit and develop them are the most important asset of all.

Getting started on the changes we've outlined will be the hardest part of the process. And those changes must be accompanied by rigorous training because few if any managers will have all the high-level people skills required in their reimagined roles. But once you've invested time and energy in empowering your middle managers, the rewards for your organization will be immense.

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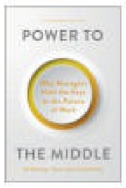

EMILY FIELD *and* **BRYAN HANCOCK** *are partners at McKinsey & Company, and* **BILL SCHANINGER** *is a senior partner emeritus. They are the authors of* Power to the Middle: Why Managers Hold the Keys to the Future of Work *(Harvard Business Review Press, 2023), from which this article is adapted.*

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Features

“Humans have boundless creativity. However, the challenge of communicating their concepts…restricts vast numbers of people from contributing new ideas. Generative AI can remove this obstacle.”

“HOW GENERATIVE AI CAN AUGMENT HUMAN CREATIVITY,” PAGE 56

Illustration by the generative AI program **MIDJOURNEY**

How Generative AI Can Augment Human Creativity

Use it to promote divergent thinking.

OPENER IMAGES GENERATED BY
MIDJOURNEY

These images were created using the prompts light bulb, flower, pastel, geometric shapes, simplicity, clean lines, and minimal still life.

AI & MACHINE LEARNING

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ABOUT THE ART
All images were created using generative AI. Pictured on right: The authors prompted Midjourney to produce an image combining an elephant and a butterfly, which they dubbed "phantafly."

There is tremendous apprehension about the potential of generative AI—technologies that can create new content such as audio, text, images, and video—to replace people in many jobs. But one of the biggest opportunities generative AI offers to businesses and governments is to augment human creativity and overcome the challenges of democratizing innovation.

The term "democratizing innovation" was coined by MIT's Eric von Hippel, who, since the mid-1970s, has been researching and writing about the potential for users of products and services to develop what they need themselves rather than simply relying on companies to do so. In the past two decades or so, the notion of deeply involving users in the innovation process has taken off, and today companies use crowdsourcing and innovation contests to generate a multitude of new ideas. However, many enterprises struggle to capitalize on these contributions because of four challenges.

First, efforts to democratize innovation may result in evaluation overload. Crowdsourcing, for instance, may produce a flood of ideas, many of which end up being dumped or disregarded because companies have no efficient way to evaluate them or merge incomplete or minor ideas that could prove potent in combination.

Second, companies may fall prey to the curse of expertise. Domain experts who are best at generating and identifying *feasible* ideas often struggle with generating or even accepting *novel* ideas.

Third, people who lack domain expertise may identify novel ideas but may be unable to provide the details that would make the ideas feasible. They can't translate messy ideas into coherent designs.

And finally, companies have trouble seeing the forest for the trees. Organizations focus on synthesizing a host of customer requirements but struggle to produce a comprehensive solution that will appeal to the community at large.

Our research and our experience working with companies, academic institutions, governments, and militaries on hundreds of innovation efforts—some with and some without the use of generative AI—have demonstrated that this technology can help organizations overcome these challenges. It can augment the creativity of employees and customers and help them generate and identify novel ideas—and improve the quality of raw ideas. We have observed the following five ways.

1

PROMOTE DIVERGENT THINKING

Generative AI can support divergent thinking by making associations among remote concepts and producing ideas drawn from them. Here's an example of how we used Midjourney, a text-to-image algorithm that can detect analogical resemblances between images, to generate novel product designs based on textual prompts from a human. (We utilized Midjourney, ChatGPT, and Stable Diffusion for the examples in this article, but they are just a few of a host of generative AI tools that are now available.) We asked Midjourney to create an image that combined an elephant and a butterfly, and it produced the chimera we dubbed "phantafly."

We then used the detailed rendering from Midjourney to inspire prompts in Stable Diffusion, another popular

IDEA IN BRIEF

THE PROBLEM

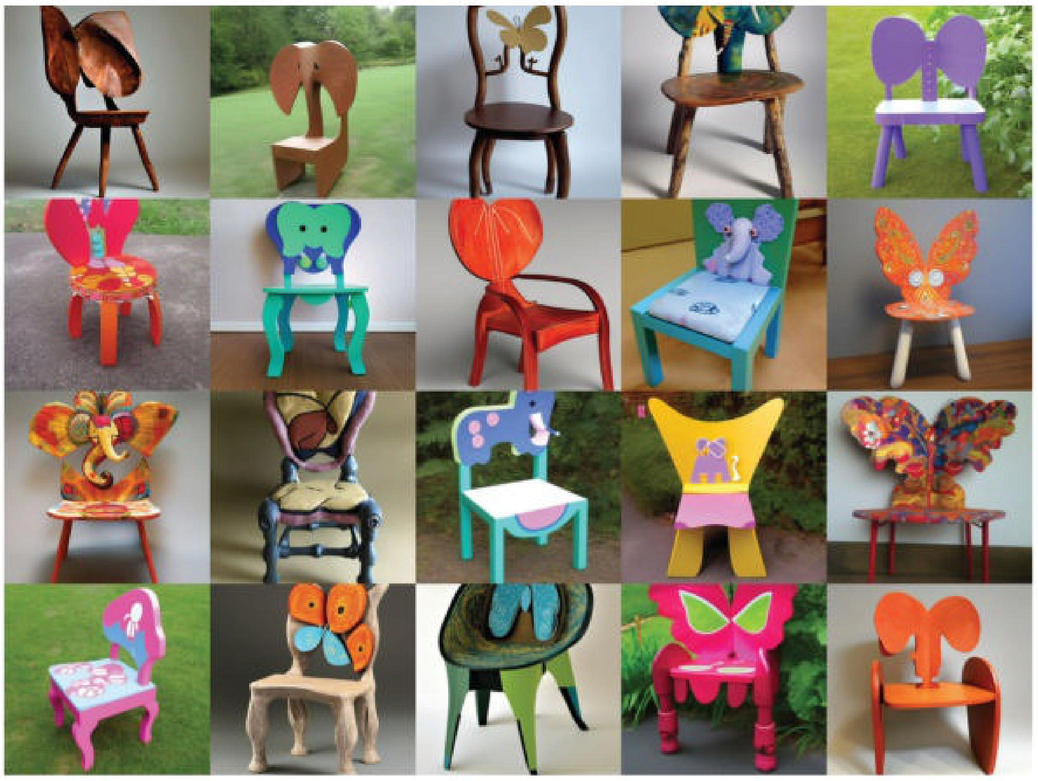
In the past two decades, companies' efforts to involve outsiders in the process of coming up with new offerings have taken off. Crowdsourcing and idea competitions are two prime examples. But firms still struggle to make use of the plethora of ideas that are generated.

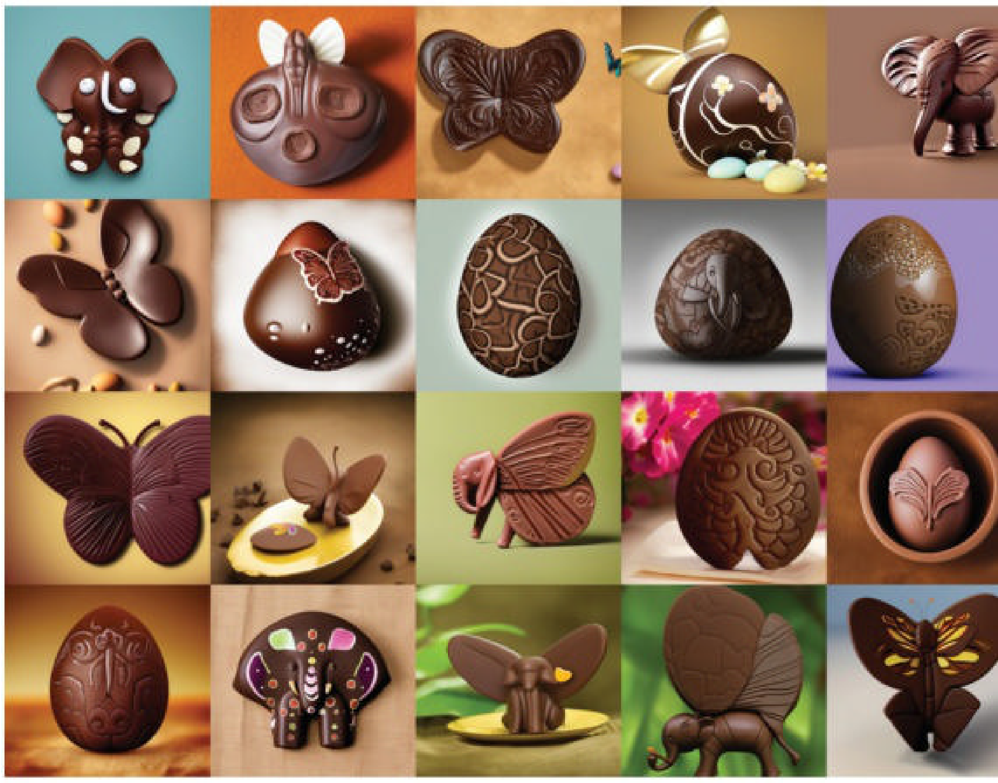
THE ROOT CAUSES

A lack of an efficient way to evaluate the ideas, domain experts' struggles in accepting novel ideas, the inability of contributors to provide details needed to make their ideas feasible, and the challenge of synthesizing different ideas are all factors.

THE SOLUTION

Generative AI can help overcome these challenges. It can augment the creativity of employees and customers and help them generate and identify novel ideas as well as improve the quality of raw ideas.





text-to-image model. Stable Diffusion generated a range of ideas for different product categories, including chairs and artisanal chocolate candies (see images above).

Rapidly and inexpensively producing a plethora of designs in this way allows a company to evaluate a wide range of product concepts quickly. For example, a clothing company that uses generative AI to create new designs for T-shirts could stay on top of trends and offer a constantly changing selection of products to customers.

Consider another example of how this technology can connect ideas to create concepts that an individual or a team might never have come up with themselves. We used ChatGPT, a type of generative AI known as a large language model, to guide the production of ideas. We asked it to generate ideas through a process of *trisociation* by connecting three distinct entities (an extension of the bisociation creativity technique). Our team gave ChatGPT the following prompt: "You will play the role of an ideator. You will randomly generate 10 common nouns. You will then randomly select any two of the 10 nouns. You will then ask me for a third noun. You will generate a business idea by combining or associating the two nouns you identified and the noun I identified."

ChatGPT generated the nouns "food" and "technology." When prompted, we provided the additional noun "car." ChatGPT produced the following business idea in short order: "A smart food-delivery service that uses self-driving cars to transport meals to customers. The technology aspect could involve using AI to optimize delivery routes, track food temperature in real time, and provide customers with real-time updates on the status of their orders. The service could target busy professionals and families who want convenient and healthy meal options without sacrificing taste and quality."

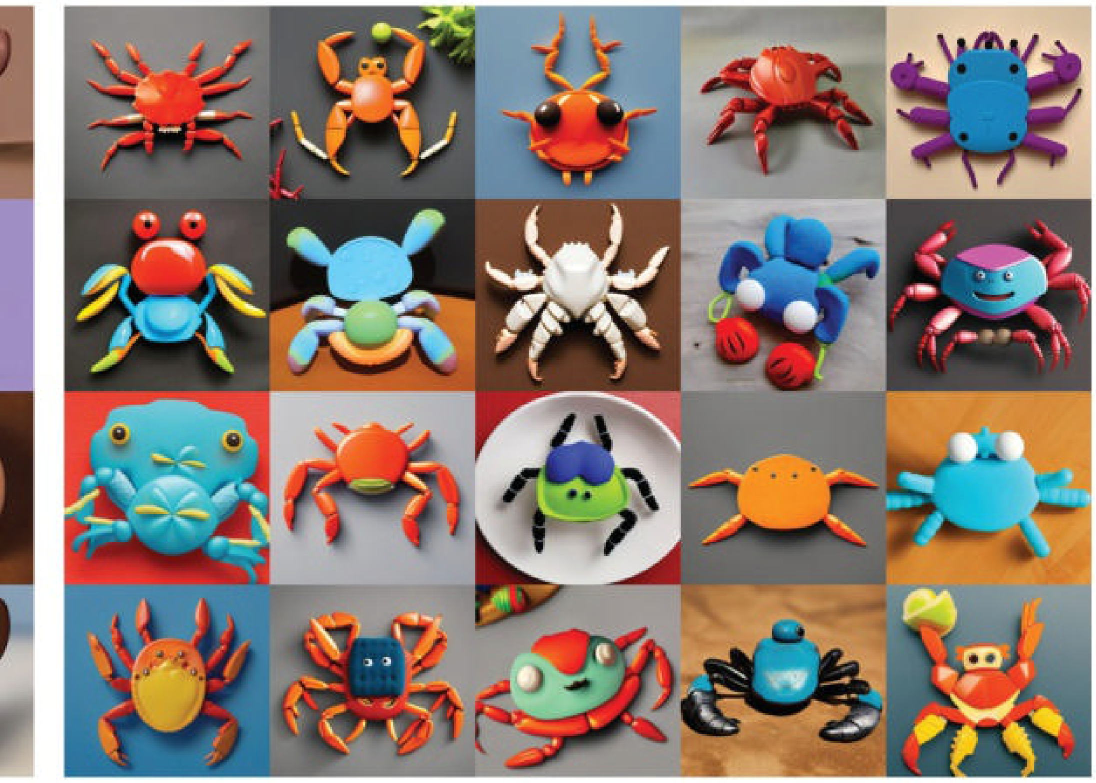
In a separate round, ChatGPT produced the nouns "airline" and "chair." When prompted, we provided "university," and ChatGPT came up with a business concept that provides a convenient, cost-effective way for students and academics to travel to conferences and workshops around the world along with access to a library of educational books during the flight. It proposed that the company be called Fly and Study or Edu-Fly.

2

CHALLENGE EXPERTISE BIAS

During the early stages of new-product development, atypical designs created by generative AI can inspire designers to think beyond their preconceptions of what is possible or desirable in a product in terms of both form and function. This approach can lead to solutions that humans might never have imagined using a traditional approach, where the functions are determined first and the form is then designed to accommodate them. These inputs can help overcome biases such as design fixation (an overreliance on standard design forms), functional fixedness (a lack of ability to imagine a use beyond the traditional one), and the Einstellung effect, where individuals' previous experiences impede them from considering new ways to solve problems.

Here's an example of this process. We asked Stable Diffusion to generate generic designs of crab-inspired toys but provided it with no functional specifications. Then we



From left to right: The authors prompted Stable Diffusion to generate designs for chairs and for artisanal chocolates inspired by "phantafly." In a separate exercise, they asked Stable Diffusion to come up with crab-inspired toy concepts.

imagined functional capabilities after seeing the designs. For instance, in the collection of crab-inspired toys shown above, the image in the top left could be developed into a wall-climbing toy; the image next to it could be a toy that launches a small ball across a room. The crab on a plate near the center could become a slow-feeder dish for pets.

This is not a completely novel way to come up with unusual products: Much of the architecture and ride functionality in theme parks such as Disney World has been driven by a desire to re-create scenes and characters from a story. But generative AI tools can help jump-start a company's imaginative designs.

3

ASSIST IN IDEA EVALUATION

Generative AI tools can assist in other aspects of the front end of innovation, including by increasing the specificity of ideas and by evaluating ideas and sometimes combining them. Consider an innovation challenge where the goal is to identify ways to minimize food waste. ChatGPT assessed the pros and cons of three raw ideas: (1) packaging with dynamic expiration dates (labels that automatically change either the dates or colors based on the environmental conditions in the places where they are stored); (2) an app to help users donate food; and (3) a campaign to educate people on types of expiration dates and what they represent in terms of freshness and fitness for use. ChatGPT produced a balanced analysis of the pros and cons that mirrored what we might expect from an exchange between two interested persons discussing the merits of such ideas.

When ChatGPT evaluated the concept of dynamic expiration-date packaging, for instance, it determined that it would help consumers better understand the shelf life of products and encourage food manufacturers to produce smaller batches that would be replenished more frequently on grocery shelves. In addition, ChatGPT pointed out that dynamic expiration dates may require significant changes to the manufacturing and packaging process and as a result, could increase the costs to both manufacturers and consumers.

ChatGPT determined that the food-donation app could encourage people to use up their food before it goes bad and reduce food waste by giving unopened, edible food to those in need. It cautioned that the app may require a large user base to be effective and that the transportation and distribution of food from a wide variety of unregulated sources could pose safety concerns.

It stated that the pros of an education program for consumers were increasing consumer awareness of the meaning of different expiration labels and helping them make more-informed decisions about food purchases and waste. But ChatGTP warned that this education program could be overly complex because expiration dates are not standardized across all food products. And it cautioned that educating users on different types of expiration dates can be costly if the program is broad in scope, particularly if it involves widespread campaigns or educational materials.

Generative AI can go beyond simple pros and cons and help humans evaluate dimensions of creativity such as novelty, feasibility, specificity, impact, and workability. We asked ChatGPT to assess the same examples using these criteria.

Here is its assessment of the dynamic expiration-date packaging concept:

Novelty: Somewhat novel. There have been efforts to develop smart packaging that can extend the shelf life of food products, but the idea of dynamic expiration dates is an emerging concept.

Feasibility: May be challenging to implement as it requires the development of new packaging materials and technologies. It would also require collaboration with food manufacturers, regulators, and distributors.

Specificity: It's specific in that it addresses the problem of food waste by providing consumers with more-accurate expiration dates for their food.

Impact: Could have a significant impact on reducing food waste and improving food safety. When provided with more-accurate expiration dates, consumers would be more likely to use their food before it goes bad.

Workability: It would most likely require significant resources and expertise to develop and implement and may take several years to fully realize its potential.

Here is ChatGPT's assessment of the app for donating food close to expiration:

Novelty: Not particularly novel. There are already many programs and organizations dedicated to reducing food waste and donating surplus food to those in need.

Feasibility: Highly feasible. There are many established models and an infrastructure in place to support food donation efforts.

Specificity: Specific in its aim to reduce food waste and address issues of food insecurity.

Impact: Has the potential to make a significant impact as it addresses both food waste and hunger. By redirecting surplus food to those in need, it can help reduce food waste while also improving food security for vulnerable populations.

Workability: Highly workable in that it can be implemented quickly and at a relatively low cost. It would require partnerships with food manufacturers, distributors, and food banks, as well as volunteers to collect and distribute the donated food.

Finally, here is how ChatGPT evaluated the idea to educate users on different types of expiration dates:

Novelty: Not particularly novel. There have been efforts to educate consumers on the meaning of expiration dates and how to properly store food to extend its shelf life.

Feasibility: Highly feasible. It can be implemented through various means, such as public awareness campaigns, educational materials, and media outreach.

Specificity: Specific in its aim to educate consumers on the different expiration dates and how to properly store food to reduce food waste.

Impact: Potentially significant. Educating consumers on the different expiration dates and how to properly store food will make them more mindful of food waste and take steps to reduce it.

Workability: Highly workable and can be implemented at a relatively low cost. It would require collaboration with food industry groups, government agencies, and other organizations to develop and distribute educational materials.

Using ChatGPT's assessments, it would be relatively easy to evaluate these three concepts, or quickly score or organize them based on the criteria that matter most.

4 SUPPORT IDEA REFINEMENT

Generative AI tools can solve an important challenge faced in idea contests: combining or merging a large number of ideas to produce much stronger ones. For example, an organization that is trying to win a contract or a grant to develop a food-waste-reduction program can use the tools to combine the three concepts discussed earlier. We did this in two steps. First, we asked ChatGPT to flesh out each of the concepts:

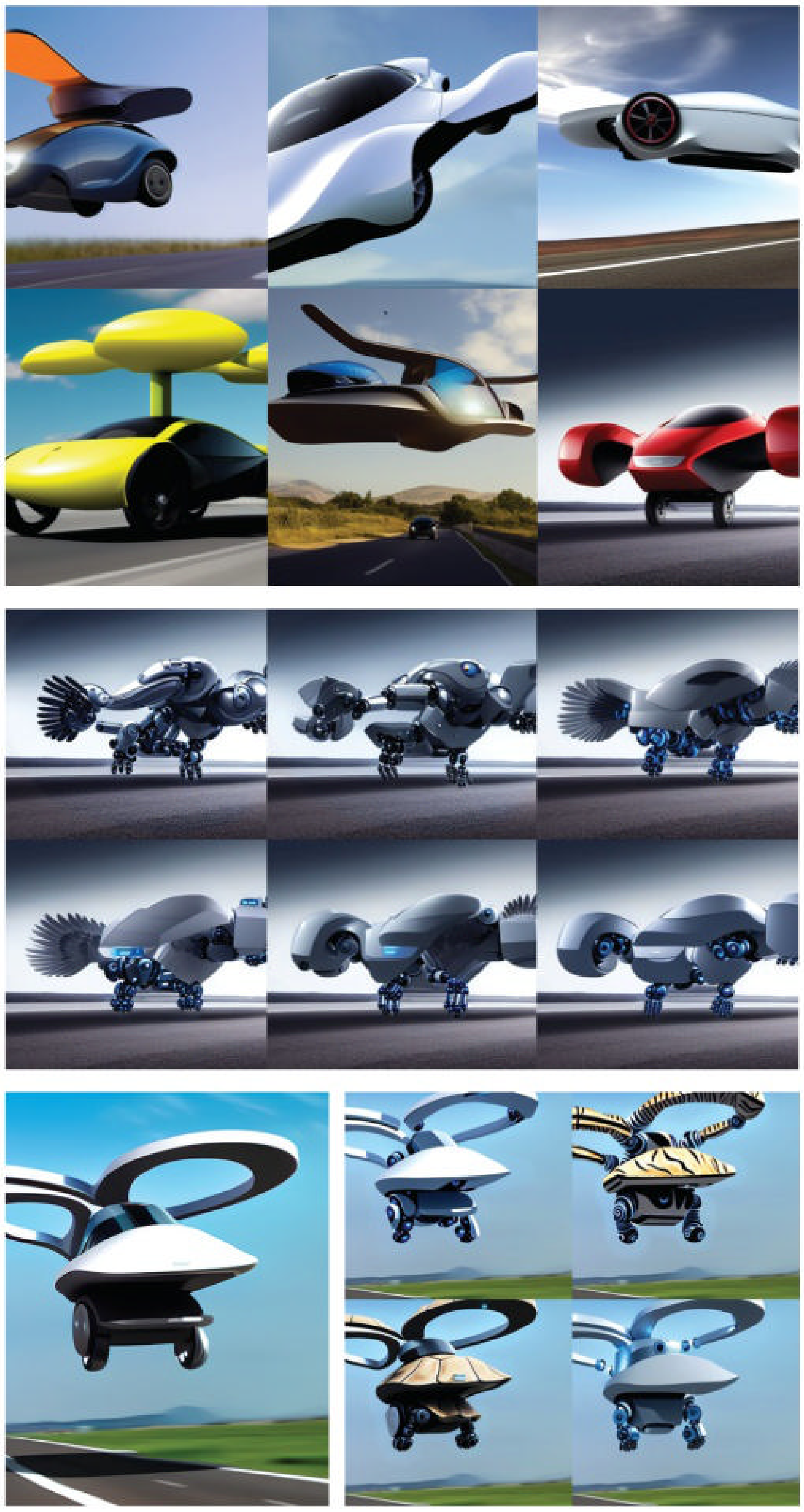
1. "Dynamic expiration dates are a solution aimed at reducing food waste. This involves incorporating technology into packaging that can track and adjust the shelf life of products in real time. By using sensors, the expiration date can be updated based on changes in environmental factors, providing consumers with a more accurate estimate of when a product will go bad."

2. "An app that enables consumers to donate food close to its expiration date aims to reduce food waste by giving unopened, edible food to those in need. The app connects individuals who have surplus food to local organizations that can use it. By using technology to facilitate food donations, the app can help reduce food waste and provide for those in need."

3. "Educating users on the different types of expiration dates can help users make informed decisions about purchasing and consuming food, reducing waste, and saving money. By clarifying the meaning of 'best before,' 'use by,' and other expiration labels, an education campaign can help users better understand how to determine if food is safe to eat and when it is time to dispose of it."

Next we asked ChatGPT to merge all three ideas into one food-waste program. In short order it produced the following description: "The comprehensive food-waste-reduction solution involves creating smart packaging with dynamic expiration dates, establishing a program for donating surplus food, and educating the public on the importance of understanding food expiration dates. The smart packaging helps consumers make informed decisions about food

Generative AI tools can solve an important challenge faced in idea contests: combining or merging a large number of ideas to produce much stronger ones.



From top to bottom: The authors asked Stable Diffusion to design a flying automobile. Then they chose one of those designs and asked Stable Diffusion to reimagine it to resemble a robot eagle. The bottom image is another AI-generated concept of a flying car, with versions that resemble a dragonfly, a tiger, a tortoise, and an eagle.

freshness, the donation program ensures surplus food is put to good use, and education raises awareness about the impact of food waste. This solution has the potential to significantly reduce food waste and create a more sustainable future by empowering consumers, working with industry and government, and making better use of surplus food."

5 FACILITATE COLLABORATION WITH AND AMONG USERS

When developing new product ideas or designs, generative AI can facilitate collaborations between a company's designers and users of a prospective product and among users themselves. In other words, the technology makes co-creation of new offerings much easier and less expensive. For example, a business can give users access to tools to generate designs and then create a personalized version of the product based on the customer's preferences. Alternatively, users' designs could be posted on a crowdsourcing platform where they are evaluated by the community. The top designs could then be further developed by additional collaborators.

To illustrate the potential, we show how a flying car—something people have been trying to develop for more than 100 years without much success—might be designed. We gave Stable Diffusion this prompt: "Design a product that can fly but also drive on the road, a flying automobile." Stable Diffusion generated several designs, and we selected what we considered to be the most promising one: the vehicle in the lower right corner of the top collage.

Then we asked Stable Diffusion to take that design and reimagine the concept so that the car "resembles a robot eagle." The second collage shows the variations that the generative AI program quickly produced—from the top left design that looks most like a robot eagle to the more feasible concept of a flying automobile in the lower right corner.

A second example illustrates how designers can use such tools to collaborate on thematic variations of a structural design. They began with a flying-automobile design generated by AI and asked the tool to produce versions that resembled a dragonfly, a tiger, a tortoise, and an eagle (see bottom collage).

> Generative AI's greatest potential is not replacing humans; it is to assist humans in their efforts to create hitherto unimaginable solutions.

An alternate approach is for human collaborators to use a tool like ChatGPT to develop details of the product and then use one like Stable Diffusion to obtain visual designs based on a series of prompts that build upon one another. We gave ChatGPT a similar prompt to what we had given to Stable Diffusion: "Describe a product that can fly but also drive on the road, a flying automobile."

ChatGPT provided this description: "The flying automobile is a sleek and futuristic vehicle that is built for the ultimate adventure. It has the appearance of a stylish sports car with smooth curves and polished exterior but with hidden rotors that allow it to take flight."

When we gave that description to Stable Diffusion, it provided the top image. Next we asked ChatGPT to reimagine the description to include the information that the product must resemble a dragonfly and have illumination markers for flying at night. It came back with the following: "With its slender body, extended wings, and hidden rotors, the vehicle is reminiscent of a dragonfly come to life. The illuminated markers located along the wings and body create a stunning visual effect, helping to make the vehicle visible in the darkness."

Stable Diffusion translated that description into various versions that maintained the feasible design and added elements of illumination based on the pattern of a dragonfly's wings. The images below the original design are examples.

HUMANS HAVE BOUNDLESS creativity. However, the challenge of communicating their concepts in written or visual form restricts vast numbers of people from contributing new ideas. Generative AI can remove this obstacle. As with any truly innovative capability, there will undoubtedly be resistance to it. Long-standing innovation processes will have to change. People with vested interests in the old way of doing things—especially those worried about being rendered obsolete—will resist. But the advantages—the opportunities to dramatically increase the number and novelty of ideas from both inside and outside the organization—will make the journey worthwhile. Generative AI's greatest potential is not replacing humans; it is to assist humans in their individual and collective efforts to create hitherto unimaginable solutions. It can truly democratize innovation.

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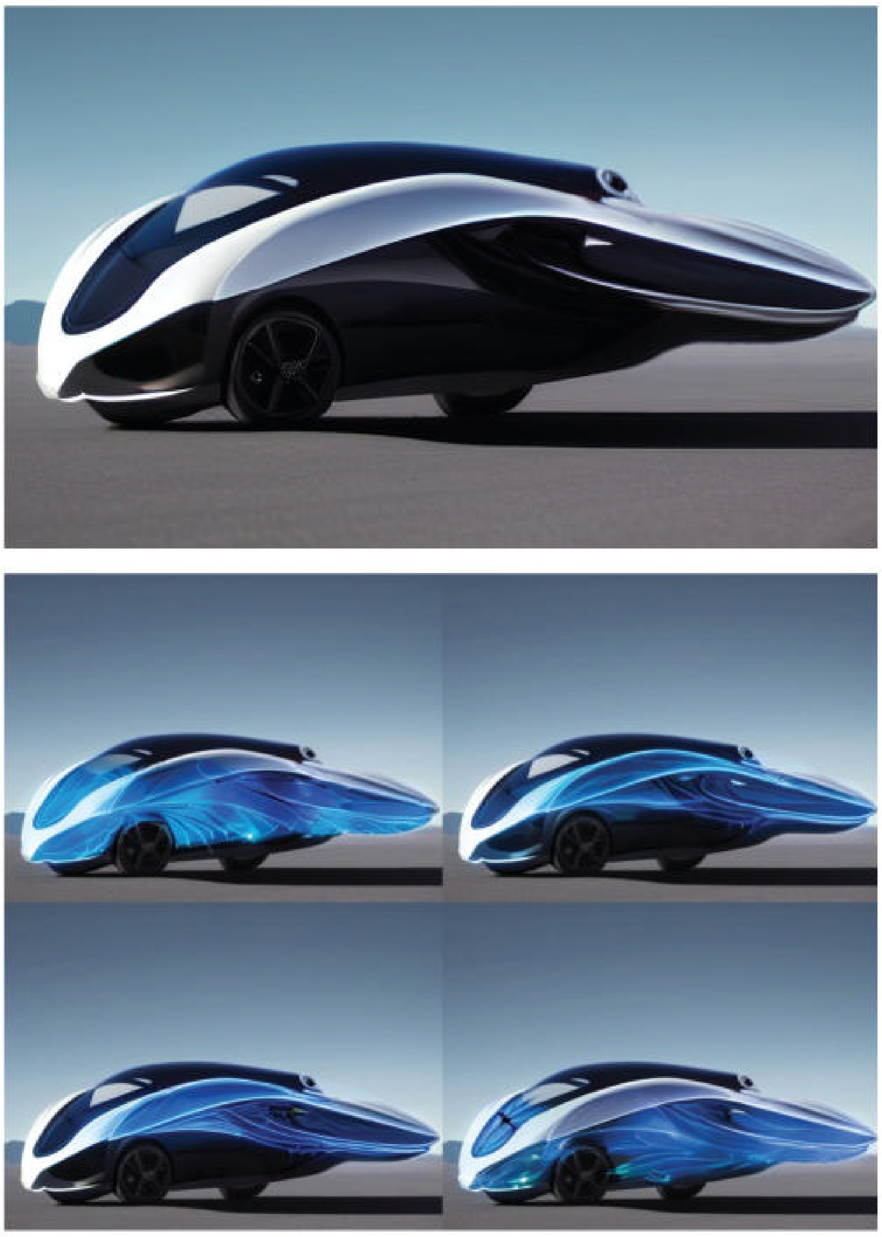

From top to bottom: The authors used ChatGPT to describe a flying automobile and asked Stable Diffusion to generate a design from that description. They repeated the process to produce variations on the design that incorporate dragonfly details and illumination.

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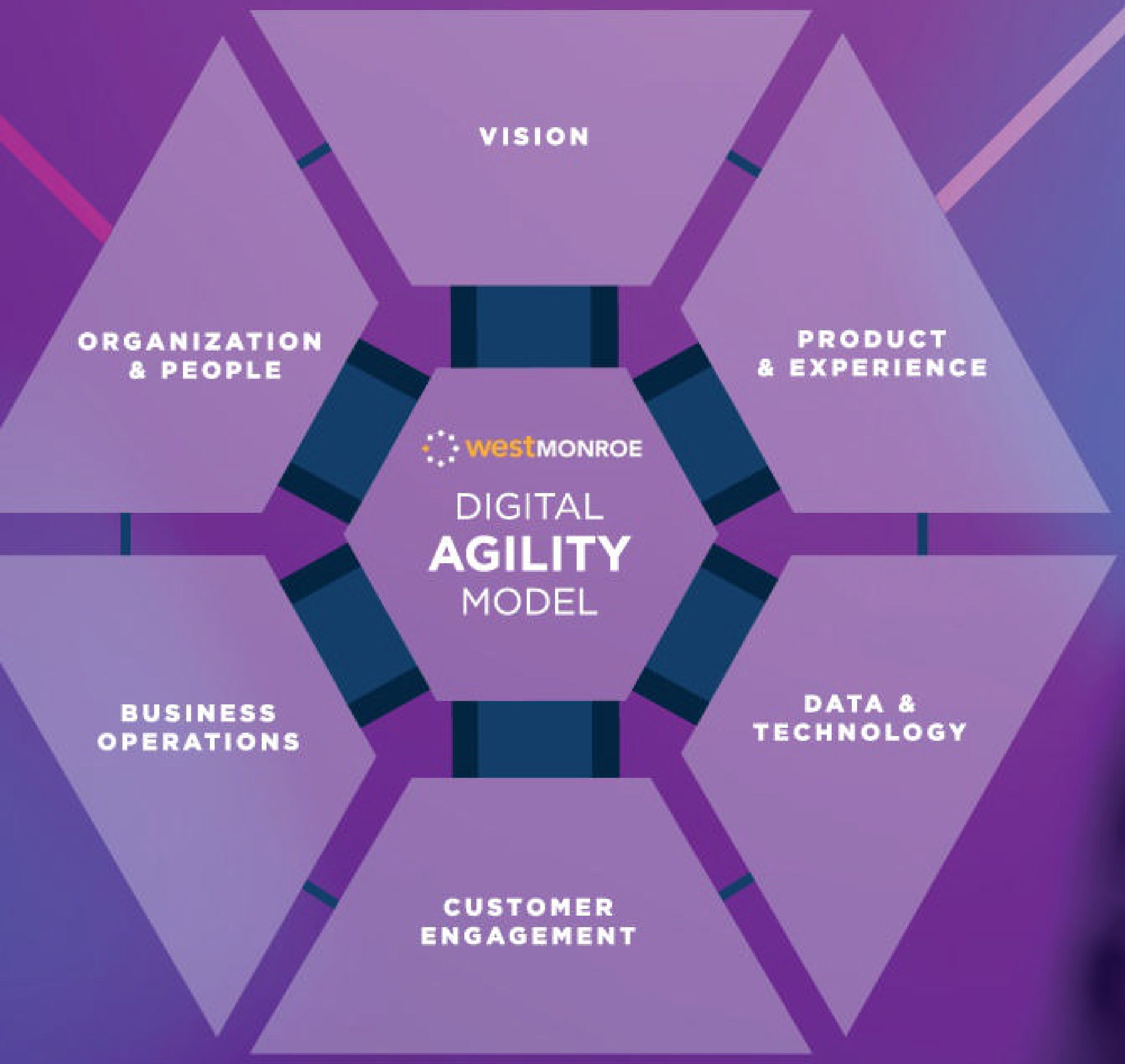
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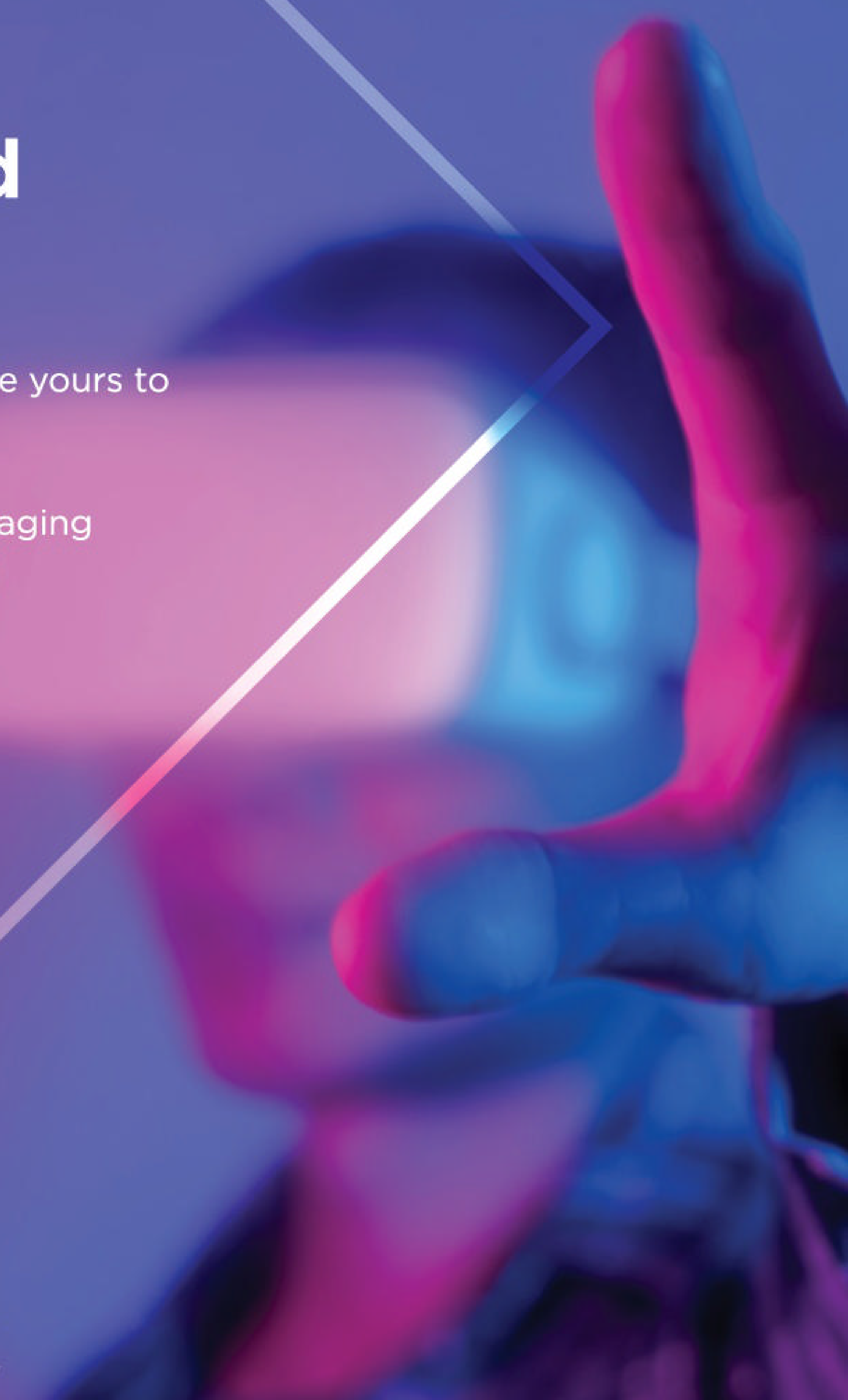

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LABOR

The Labor-Savvy Leader

The time has come for management to start working with—rather than against—organized labor. Here's how.

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LABOR

> U.S. consumers now consider the treatment of workers to be the most important of environmental, social, and governance issues.

Business leaders today are confronting labor challenges of the greatest consequence.

Because of inflation and the pandemic, workers feel less secure in their jobs and uncertain about whether they can afford a decent life—trends that have been mounting for decades. At the same time, they want more from their jobs: In addition to higher pay and dignified working conditions, they expect their employers to reflect their values. Thanks to social media, employees are able to communicate their expectations, experiences, and grievances in new ways. They can share privately with one another and widely with the public, in real time. They can connect with and enlist customers and other stakeholders as allies more easily than ever, making it harder for employers to suppress their voices. Given all these forces, it's not surprising that a growing number of workers, across a wide range of industries and roles, are organizing.

In fact, worker interest in joining a union is at its highest in decades—and in the United States public support for unions is as high as it was in 1965. Urged on by a new generation of labor leaders, many workers actually see organizing as an expression of care for their companies. We expect this trend—which includes unions (organized by occupation, company, or otherwise) and many other forms of organized labor, from informal employee petitions and walkouts to more-formal structures such as mutual aid groups and worker cooperatives—to intensify in the years ahead.

Most companies aren't prepared for this new wave of organized labor. For much of the past century, when workers organized to demand change, companies' knee-jerk reaction was fear that unions would hurt shareholder value by raising labor costs or slowing innovation. CEOs responded with one strategy: Fight, at all costs. This was brutally effective. In the last half of the 20th century, with companies perfecting the skill of union busting and labor laws too weak to deter it, unions lost much of their power and influence—so much so that most business leaders now have little experience with organized labor.

If companies continue to assume that organized labor destroys value and to reflexively fight all collective-action efforts, as has been happening at Starbucks, Amazon, and elsewhere, they run an enormous—even existential—risk. They may permanently disenchant their workforce and stamp out employees' investment in their company's success. They also risk harming their brands: U.S. consumers now consider the treatment of workers to be the most important of environmental, social, and governance issues.

IDEA IN BRIEF

THE HISTORY

For much of the past century, U.S. companies feared that unions would hurt shareholder value and innovation, so they responded to organized labor with one strategy: Fight, at all costs. They were so successful that today's business leaders have little experience with organized labor.

THE CHALLENGE

With worker interest in joining a union now at its highest in decades—and public support for unions in the United States as high as it was in 1965—business leaders need a new playbook.

THE SOLUTION

Companies need to reinvent corporate America's relationship with labor so that more people can share in the rewards and firms can compete and grow in new ways. That will require leaders to learn how to work with, rather than against, organized labor.

Even some shareholders are starting to look positively at organized labor.

Business leaders can choose a different path: They can start working to reinvent corporate America’s relationship with labor so that more people can share in the rewards and companies can compete and grow in new ways. Choosing that path will require leaders to learn how to work with, rather than against, labor. Indeed, in the next 20 years, the skill of leading an organized workforce—or leading as if your workforce is organized, regardless of its union status—may well become the critical leadership skill.

To be sure, the unions’ old playbooks need updating, too. In conversations with labor leaders, we’ve heard that the societal shifts that challenge companies also prompt disruption and soul-searching among traditional labor organizations. Both must evolve.

In this article, building on insights from a roundtable we host with the Aspen Institute’s Economic Opportunities Program and MIT’s Institute for Work and Employment Research, we lay out a more collaborative—and effective—approach to leading the organized, and organizing, workforce. We’ll focus on the U.S. landscape in this article, but we’ll also highlight approaches that work in Europe and around the world. Ultimately, we hope to build a foundation for overdue discussions about how business and organized labor need to modernize, and how to bring about changes in the law to accommodate new realities.

The Balance of Power

Every step of the labor-organizing process presents an opportunity to build trust and act in the interest of long-term success—or to hamstring progress. If companies and unions forge successful relationships, workers and companies reap benefits. These include better employee satisfaction (and retention), training opportunities (union apprenticeships are some of the best training available), improved customer service, new ways of introducing technology, and more.

While not every union representative will be a willing partner in a constructive relationship, the workers they represent generally want respectful engagement from both sides. Stakeholders—including employees, customers, investors, and others—may look to the party with more power to set the standard. Despite what it may feel like to a CEO during an organizing campaign, companies typically have much more power than their workers do. So we recommend that employers lead by taking the high road, whether or not their organized labor counterparts start there.

Leaders have many choices in responding to organizing—choices that respect workers’ rights and result in a stronger company. Options range from voluntarily recognizing the union without requiring a National Labor Relations Board–administered election (an increasingly popular approach), to remaining neutral and leaving your employees to decide whether to organize (as Microsoft recently did), to respectfully communicating why you don’t think organizing is the answer to employee concerns.

Ironically, the labor organizations likely to be most valuable to business will be the strongest ones. Good partnerships require partners with balanced power. Strong unions cultivate deep relationships with workers and are their legitimate, democratically elected representatives. A labor organization capable of deploying a full range of methods—collaborating, yes, but also building coalitions with customers, community leaders, and investors; seeking a role in corporate governance; and, as a last resort, striking—might be exactly the balance of power that will serve business best in the long run.

If your employees do organize, how do you build a relationship that serves your needs for flexibility and productivity and also meets workers’ new demands? Companies need to take an active role in relating to organized labor, rather than passively accept whatever a worker organization wants. A good relationship requires two attentive, powerful parties. Traditional arm’s-length labor-management relations and collective bargaining fail to meet workers’ expectations for a greater voice and impede business opportunities for flexibility and productivity.

Getting to a Contract

The foundation of most union work in the United States is collective bargaining: reaching a contractual agreement between a company and its workforce as represented by a union. Contract negotiations can go well or poorly depending on how the company and the union manage them. Here are some guidelines for getting started.

The labor organizations likely to be the most valuable to business will be the strongest ones. Good partnerships require partners with balanced power.

Assume that you don't understand your own workers. Many companies argue that a union is a "third party" that has ulterior motives—for example, building its own membership regardless of potential harm to companies or even some workers. Companies use that assumption as an excuse to ignore valid worker concerns.

That's a damaging starting point. Every organized group of workers has asks. Your first step is to learn what they are—and the way to do that is to pose questions and listen. Invite elected leaders to spell out their asks and the underlying problems that give rise to them. Most executives know surprisingly little about what life is like for their workers. To really understand what they want, you also need to get out to the front lines and engage workers directly in conversation.

While many union leaders want to see companies succeed, some are indifferent to causing a company harm. In that case, you'll need to figure out who else at the union you can appeal to. Build relationships with union representatives who recognize that when companies thrive, their workers also thrive.

Invest in training. Given how long unions have been in decline, your company may lack the leadership skills necessary to build a relationship with a labor organization. If that's the case, invest in training.

Consider Kaiser Permanente, which, when it started building a labor-management partnership 25 years ago, teamed up with union leaders and invested in training managers, supervisors, union representatives, and all new hires in how to collaborate successfully with one another. That investment paid off—for example, in avoiding job loss when the company transitioned to electronic medical records. Prior to forming the partnership with the unions, Kaiser had suffered a decade of losses; since the partnership, it has managed two decades of strong returns while paying industry-leading wages. At times, relationships with the unions have been fraught, like any partnership—and that's OK.

To help steer your company through negotiations, whether smooth or rocky, you should consider sending union and management representatives to offsite training programs together, to develop everybody's skills while strengthening their relationships.

Seek advice from an expert who shares your goals. Some companies retain an outside lawyer or consultant to negotiate with their workforces. Rule out anybody associated with a firm that specializes in "union avoidance." No matter what lip service those firms pay to the idea of partnership with the other side, they often delay or avoid reaching an agreement, damage company reputations, and fail to build a productive relationship with labor.

If you hire a consultant, make sure that the person has a successful track record in negotiating first contracts, always a challenging task, and understands the importance of laying a foundation for an innovative and trusting relationship. Steer clear of contract language that protects "management prerogatives" by minimizing the union's influence. Remember that while your negotiator will represent you, you're the one who has final say. Successful high-road negotiations require senior management to get directly involved and to avoid overdelegating to consultants.

Whether or not you hire an outside negotiator, you'll need an internal negotiating team staffed with managers from a variety of departments who understand your approach and share your goals. Your toughest discussions may not be with the union team across the table but within your own team, so do everything you can to find and empower internal allies. Even if your company had a hostile posture toward unions in the past, you will find people eager to turn over a new leaf and collaborate.

Set the ground rules. This involves "bargaining over how to bargain." Meet early with union representatives to define rules for the negotiations—for example, when and how to use sidebar caucuses, the frequency of meetings, how both sides should communicate with the media and constituents, and whether to use subcommittees. Working out these rules can make it much easier to get started and can shape how later, more-substantive negotiations will fare.

This process can be difficult. As we've seen at Starbucks and at some universities, many younger workers demand open negotiations in which the outside world can experience events at the bargaining table in real time—via Zoom, Twitter, or the like. Old-school labor negotiators may pull their hair out at the thought, but remember: Management needs to experiment to discover new solutions.

Set the tone yourself. Many unions fear that companies' management teams aren't interested in negotiating in good faith and would prefer to delay and confuse matters for as long as possible. That fear is valid, given the traditional

playbook of many newly unionized companies, so reassure your union representatives right from the start. An appropriately senior member of your management team, even the CEO or the head of the relevant business unit, should set the tone in the opening session by expressing a sincere desire for frank, civil discussions in which people listen actively, ask lots of questions, and introduce ideas with a collaborative "What if we...?" framing. Guides to negotiation—among them the classic *Getting to Yes*—encourage participants to focus on the other side's interests rather than their own demands. That's good advice for labor negotiations.

How does this look in practice? Consider how Dennis Rocheleau, a retired head of labor relations at General Electric, once opened negotiations:

We are not so naive as to believe that our mutual interest in a peaceful, equitable settlement will automatically produce a consensus on how such an agreement should be defined. If we both see the world in precisely the same relief and hues, one of us is probably unnecessary. We recognize that the world is wide, and there is room enough in it to accommodate an expansive range of opinions and attitudes...listen to others' perspective on an issue, explore many alternatives, eschew a reflexive retreat to the homey confines of your preconceived ideals or traditions.

Bargaining is emotional, and flare-ups, walkouts, and showboating on both sides of the table are common. Expect this. Tolerate some of it. But call out personal attacks or actions that violate the norms and rules of the game that you agreed to at the outset.

Decide what to bargain over. Labor law mandates only a few topics for bargaining—notably, wages, hours, and working conditions. However, workers today interpret "working conditions" to include not only physical safety but also voice and respect, company values, climate change, and other social policies. Whether or not the law requires you to bargain over these issues, you're better off addressing them head-on if you want a process that builds trust.

DEI has figured prominently in recent negotiations in many industries, as in provisions negotiated by SEIU Local 1199NW (a union of nurses and service workers) and Seattle-based Swedish Hospital, and in the wind-farm industry, where union agreements often include explicit provisions for recruiting a diverse workforce.

Another increasingly important bargaining topic is how to introduce technology into the workplace, especially given shifts in manufacturing technologies and advances in artificial intelligence. Unions like SAG-AFTRA in the entertainment industry and UNITE HERE in hospitality are negotiating with companies like MGM Resorts, Caesars, and others to get advance notice of technological plans and to create opportunities for worker input in the design of new technologies.

Ask yourself: What's good for *everybody*? The holy grail in labor negotiations is a contract that gives workers what they want and strengthens the company. If you see a negotiation as a zero-sum game where any gain for workers costs you, then you'll miss opportunities to invest in worker success that will benefit the company. There are no cookie-cutter approaches here, so you and the union have to innovate to find shared wins. (And if you've built a healthy negotiation process, you'll find it's easier to innovate from a place of trust.) Eventually, yes, labor negotiations come down to tough trade-offs. Experiment where you can, and make sure you know your limits.

If you're concerned that the union will protect weak performers, say no to contract terms that do that (for example, allowing for promotions based on seniority); in exchange, provide more for workers in other areas (for example, adding more pay based on performance, as some independent Canadian unions have negotiated).

As in any negotiation, each party will look for ways to gain advantage. That's normal. Just make sure you set boundaries that prohibit behavior that's either wrong (like researching union leaders' personal lives and embarrassing them, a surprisingly common tactic recommended by "union avoidance" consultants) or destructive to your goal of a productive relationship with your workforce.

These practices will help you get off on the right foot, but deadlocks or strikes are always possible, even in well-structured, good-faith negotiations. That's why you need to do more than just negotiate a contract.

Beyond the Contract

As in any constructive business relationship, you should follow a no-surprises principle to engender trust. Engage your labor-leader counterparts in an ongoing dialogue and keep them informed about business developments. You'd rather that labor leaders hear about a change from you than have them read it in the press or hear it from a disgruntled union member.

Consider creating teams that bring together management representatives with workers and labor leaders to problem-solve in an ongoing way. These teams can improve the

Bargaining is emotional, and flare-ups on both sides are common. Expect this. Tolerate some of it. But call out personal attacks that violate the norms you agreed to at the outset.

operations of your company and give workers a more direct voice in their work. Kaiser Permanente has nearly 4,000 such teams, which it (and some other health care organizations) calls "unit-based teams." Similarly, Harley-Davidson, Ford, and others have made extensive use of continuous-improvement teams at the plant level.

Companies achieve the best returns on investments in new technology when they merge implementation with complementary changes in work processes, employee training, and worker input. Labor can help with this, too. The United Brotherhood of Carpenters union, for example, has created an expansive training center in Las Vegas that offers courses to its members on the latest technologies and state-of-the-art leadership techniques that are as good as those that elite business schools provide. The center brings in prototypes of new materials and production techniques from companies as diverse as Lincoln Electric, 3M, Duke Energy, and others. It both trains members, so that they can return to their jobs and train others, and offers vendors feedback on their products. It's a modern way of practicing what Japanese carmakers like Toyota said years ago: It is workers who give wisdom to the machines.

Through negotiated provisions in collective bargaining agreements, unions run some of the largest training institutions in the country. These are often governed collaboratively—by labor-management trusts, apprenticeship programs, and internal company training programs. One of the most highly respected union training programs is UNITE HERE's Culinary Academy, also in Las Vegas. The program trains workers for newly emerging jobs in hospitality, allows them to move from one occupation to another (for example, from housekeeping to restaurant positions), and serves as a one-stop center for supporting immigrant workers, teaching English as a second language, and referring workers at risk of or experiencing layoffs to new jobs.

About the Research

Starting in February 2022, the Aspen Institute's Economic Opportunities Program and MIT's Institute for Work and Employment Research have convened business leaders from a variety of industries for a series of private roundtables. Some participants have managed an organized workforce; some are experimenting with other forms of shared governance or worker empowerment. The authors host each session alongside Maureen Conway from Aspen and Wilma Liebman, a former head of the National Labor Relations Board. This article draws both from roundtable conversations and from expert interviews that inform them, including with Erica Smiley of Jobs With Justice, Damon Silvers of the AFL-CIO, Oren Cass of American Compass, and former U.S. Assistant Secretary of Labor Marty Manley, among many others.

Beyond the American Model

So far, we've focused on the legacy American model of the relationship between unions and management. But there are other models, notably in Europe, and some companies will need to embrace them. That's the case for the growing number of companies whose workforce includes many independent contractors, or other types of workers—middle management, domestic workers—whom current labor law ignores or excludes. And, of course, there are occupations where workers organize without a union—as in professional associations in law and medicine, or local worker centers.

However strong your company's culture and communications may be, and whether or not your employees are unionizing or unionized, you can make your firm's relationship with its workforce even stronger by affording your workers as much direct agency as possible over the issues that matter to them most.

Consider creating joint management-labor teams that can advise on such issues as safety and health; diversity, equity, and inclusion; and technological innovations. Many companies already have in place employee resource groups (ERGs) that provide a forum to people of color, women, LGBTQ+ employees, and allies; ERGs with an expanded remit could serve as a model for other advisory teams.

Some companies put a worker-elected representative on their board of directors, as software company Honeycomb does. In many countries, especially in Europe, this "codetermination" is common. A worker with a fiduciary duty to the company can create a channel for employees to better understand corporate strategy, pass information directly to the board in an open way, be heard, and ensure that workforce

Companies achieve the best returns from technology investments when they merge implementation with complementary changes in work processes. Labor can help with this.

questions become a regular item on the board's agenda. The process of electing representatives can also bring employees closer together and give them practice resolving issues as a group. In Germany, where workers sit on company boards by law, those workers promote higher rates of investment, higher stock values, board-member gender diversity, and better knowledge flows between management and employees.

To ensure that workers have an economic stake in the success of the firm, some companies broadly distribute employee ownership. At firms that are unionized, this is a useful tool that gives a labor organization the incentive to see the company thrive. Many venture-capital-backed companies have done this by granting stock options to employees. Private-equity-backed companies (some with the help of the nonprofit Ownership Works) look for ways for workers to share in the value they help create, through profit-sharing and other programs.

Beyond Your Company

As companies embrace the idea of experimenting with organized labor, best practices will emerge and may serve as a basis for fixing long-stagnant U.S. labor law. For example, in Europe, companies allow for workplace or companywide "works councils" elected by workers to advise on a range of issues—and U.S. law could change to make it easier to form similar councils, which are currently illegal.

Solutions will also emerge at the industry level. In the United States, most unions are organized by workplace or company. This creates unusual incentives for unions and an uneven playing field for companies: Firms that are unionized and pay good wages have to compete with nonunionized rivals that pay lower wages. A better approach would be to introduce sectoral or industry-level bargaining, a practice that was once more common in the U.S. This is an area where companies can organize—for example, by seeking bigger bargaining groups that cover enough of their industry to remove the competitive "I'm unionized, but they're not" dynamic. Companies can then focus on competing on areas other than labor costs: quality of service, innovation, and more.

Another way to revive sectoral bargaining is to create employment standards boards that bring business, labor, and government together in a single industry at the local level. Last year, California passed legislation to create one such board in the fast-food industry. Similar boards operate in major cities around the country.

The federal government now encourages companies bidding for government contracts to work with labor organizations in offering high-quality jobs. Business leaders should use these opportunities to show they can collaborate with organized labor to meet critical national needs.

AFTER WORLD WAR II, the United States experienced a sea change in labor-management relations. Society and the economy had been transformed by the war, and work needed to evolve to reflect the new reality. After years of often-violent struggle, employees at big companies organized and bargained for regular raises, health care, weekends off, retirement plans, and more. In 1950 General Motors and the United Auto Workers negotiated the so-called Treaty of Detroit, which pegged wage increases to increases in the cost of living and the national rate of productivity growth. That effort set a new standard that spread quickly to other companies and ultimately brought a new social contract into being that would govern employment, drive growth, and help workers share in prosperity for decades to follow.

Today, our society and economy have transformed again, encompassing everything from new technology to a tighter labor market, rising worker expectations for a voice in decision-making, increased public demands to hold businesses accountable for treating employees fairly, and even the risks of political extremism that stem from workers' discontent. Workers are calling for a new social contract. If business leaders stretch to create a new playbook for working with organized labor, we can again set our economy and society up for prosperity for workers and thriving success for companies in the decades to come.

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SUSTAINABLE BUSINESS PRACTICES

The Evolving Role of Chief Sustainability Officers

They once focused on optics and reputation. Today many are interacting with investors and helping set strategy.

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The role of the chief sustainability officer is undergoing a rapid and dramatic transformation.

Historically CSOs have acted like stealth PR executives—their primary task was to tell an appealing story about corporate sustainability initiatives to the company's many stakeholders, and their implicit goal was to deflect reputational risk. The role had virtually no involvement in setting company strategy or communicating it to shareholders; those responsibilities fell to the CEO, the CFO, and the head of investor relations.

Now, however, some CSOs have moved away from a role centered on messaging and instead are spearheading the true integration of material ESG (environmental, social, and governance) issues into corporate strategy. This pivotal change requires close collaboration with other members of the senior leadership team and active engagement with investors. Two factors have helped spur this transition. First, investors and executives increasingly recognize that sustainability is a significant factor in company financial performance. Second, a rising political backlash in the United States against investors who incorporate ESG into their decision-making processes has emerged, with some on the right framing this practice as woke capitalism and some on the left as an insufficient response to global challenges. That has prompted CSOs to change their focus from public communication and outreach to more direct interactions with key stakeholders and investors.

ABOUT THE ART
Photographer Tom Nagy superimposes animals on city life in his series Lost Animals.

IDEA IN BRIEF

THE PROBLEM

The chief sustainability officer (CSO) role has historically been centered on stakeholder management and PR messaging with little involvement in shaping corporate strategy.

THE OPPORTUNITY

CSOs can be more impactful if they focus instead on integrating material ESG issues into corporate strategy, engaging with investors, and collaborating with senior leadership.

THE ADVICE

Change the CSO role in four ways: Involve them in strategy and capital allocation, streamline their stakeholder interactions, engage them more fully with investors, and support them with adequate resources and expertise.

SUSTAINABLE
BUSINESS
PRACTICES

> Moving the focus from feel-good corporate social responsibility to hard-nosed sustainable value creation requires pragmatic leaders.

To date, there has been little substantive discussion on the need to professionalize and formalize the CSO role. Rather, there has been a lot of vague advice on the role, including suggestions that the CSO should take responsibility for all stakeholder interactions, and even innovation and organizational culture. The CSO has thus been charged with being all things to all people, and expectations about the role are both incoherent and grandiose.

A 2018 study conducted by one of us (Alison) found significant barriers to the professionalization of the CSO role, including enormous inconsistency across sectors, a lack of role clarity, and insufficient access to power and resources. Those barriers are now starting to fall. We recently interviewed 29 CSOs across a diverse collection of industries and countries and held discussions with 31 investors, and we found a noticeable shift in the authority and focus of the sustainability function. One visible manifestation of the shift is that CSOs are now more involved in investor meetings, and investors are embracing this change. The shift to a more central role for CSOs is most dramatically revealed in companies undergoing major business transformations in response to existential challenges. Many are in controversial sectors, and some are empowering the sustainability function as a response to historic mismanagement of their most negative external impacts.

We argue in this article for four major changes to the CSO role. The CSO should be involved in strategy and capital allocation; be more focused on and realistic about stakeholder interactions; be more fully engaged with investors; and be supported with sufficient sustainability resources and expertise throughout the entire organization, including on the board and senior leadership team.

The Right Strategy

The role of the chief sustainability officer has its roots in corporate social responsibility (CSR), and many CSOs began their careers in CSR-focused roles. Originally CSR aimed to showcase companies as responsible corporate citizens. Typical CSO-led initiatives included recycling, waste reduction, environmentally friendly energy consumption, and employee volunteer programs. The distinction between CSR and philanthropy was often unclear. There was virtually no connection between CSR and a company's strategy, capital allocation, or business model. There didn't need to be, because the CSR group was small and had limited resources—a modest cost center enabling a shiny annual CSR report.

The CSO role is finally becoming strategic, if you define strategy as the art of choosing what *not* to do. Today CSOs help identify and direct attention to the ESG issues that have a substantial impact on an organization's financial performance and risk profile. This approach aligns with broader corporate strategy-making, as it helps organizations focus on what matters most to long-term value creation.

Moving the focus from feel-good corporate social responsibility to hard-nosed sustainable value creation requires pragmatic leaders who are willing to admit that not all ESG measures are win-win—that is, good for the planet *and* for the bottom line. Companies need more nuanced and rigorous discussions about the trade-offs and conflicts that exist among stakeholder interests, and among environmental, social, and governance issues. For example, an electric-car maker that rushes to get green vehicles on the road may need to source cobalt from conflict areas in Africa; a food company that sources organic food from far-flung locations can create more carbon emissions than if it sourced food locally. The CSO should be steering these discussions.

Acknowledging trade-offs is a step toward solving a long-running problem in corporate sustainability—the tendency to focus on the important at the expense of the existential. Social media platform companies, for instance, would prefer to discuss renewable-energy data centers than their products' impact on mental health and democracy. Consumer packaged goods companies would rather talk about brands with purpose than their lobbying efforts against sugar taxes. Pharmaceutical companies would rather talk about packaging waste than drug access and pricing.

Narrowing the focus to ESG issues that are material to a company's value creation represents an evolution in the CSO role, according to Matthieu Riché, who leads sustainability at the French retailer Groupe Casino. "The first stage was creating CSR awareness, putting policy and governance in place," he told us. "The second stage was understanding and responding to increasingly sophisticated stakeholder issues. We have reaped the low-hanging fruit and are now at the

Tom Nagy/Gallery Stock

third stage, where CSR directors are on the executive committee, solving strategic dilemmas to address and finance the CSR transition in close consultation with all stakeholders, including investors."

Individual accomplishments aside, much work remains to be done. A 2022 review of 200 sustainability reports reveals a significant lack of nuanced discussions of trade-offs and priorities. For example, many organizations produce a "materiality" matrix in these reports to identify crucial ESG issues, but most fail to distinguish between value-creating and ethical concerns, or between risk-reduction measures and strategic opportunities. They also focus as much on minor issues as existential threats. The result is "everything is material" maps that offer a laundry list of ESG issues and inspirational goals but have little credibility on the specifics of execution.

Global efforts to improve nonfinancial reporting will assist CSOs in identifying and communicating which ESG issues matter most to company performance. The IFRS Foundation's newly created International Sustainability Standards Board, the European Financial Reporting Advisory Group, and the U.S. Securities and Exchange Commission are all working to establish clearer reporting standards. As with financial reporting, clear standards will enable investors to make apples-to-apples comparisons between companies in the same sector, essential for making investment decisions. Empowering investors to better analyze corporate ESG efforts will also improve the rigor of conversations they can have with CSOs.

The Right Emphasis

Numerous companies have reacted to pressure from vocal stakeholders by exaggerating their sustainability commitments or making virtuous public statements devoid of concrete action. This phenomenon has contributed to widespread cynicism and a backlash against greenwashing. It has even led some politicians to believe that adopting an anti-ESG stance could garner them voter support. CSOs must shift their focus from merely appeasing stakeholders to actively engaging with investors in order to explain how sustainability contributes to value creation. Doing so will bring more clarity on how to measure, frame, and treat sustainability initiatives. That knowledge, in turn, will strengthen CSOs' internal influence and increase their effectiveness overall.

Rethinking the CSO's role in stakeholder engagement does not mean that corporations should ignore or deprioritize stakeholder pressures: rather, the opposite. It is time to acknowledge that no corporation can manage all stakeholder interactions with the same level of intensity, and that stakeholder interests always present trade-offs. Indeed, leading corporations tend to develop expertise in dealing with the stakeholder groups that are most important to their business models because that is where they face the most friction. Apparel and food companies focus their efforts on suppliers. Mining companies focus on their impact on the communities that surround their operations. Social media companies have developed innovative approaches to community engagement because of the complexity of their content moderation challenges. It is not a coincidence that these are the issues where the companies in question have worse reputations than firms in other sectors and face the most pressure from activists.

CSOs need engagement expertise, but they must exercise it in a strategic and focused way. They cannot be all things to all people, and they shouldn't try to be the PR voice of the firm. Prioritizing who they engage with leads to better outcomes. Val Smith, CSO at Citi, explains it this way: "The CSO has always been focused on engagement, but who we engage with has changed. It's become more important to engage directly with customers and especially investors. This necessitates a deeper background in business and finance."

The Right Conversation

Growing investor interest in sustainability is often perceived by progressive commentators as a dilution of stakeholder interests, or even antithetical to them. In fact, it is the driving force for granting CSOs the internal authority and influence they need to effectively integrate material sustainability issues into strategic thinking.

In the past, CSOs met with the ESG or stewardship group from large asset managers, but those conversations typically excluded representatives from the finance function and were limited to ESG-related metrics and frameworks with little apparent link to business risk or opportunity. And when the CEO, CFO, and head of investor relations met with industry analysts and portfolio managers, sustainability was seldom part of the conversation. But today's investors want something different.

Anglo American's group head of sustainability integration and impact, Laura Brooks, told us that the company no longer has to push mainstream investors to engage on sustainability; the investors come to them. "In the last five years," she said, "investor interest in sustainability has skyrocketed. They are now interested in a whole host of specific topics and want to have detailed discussions with our subject matter experts to understand what we are doing and to track progress. That's a great step forward." Sandy Nessing, the CSO of the electric utility company AEP, saw a big shift in the focus of her role as investor interest in ESG began to grow, starting around 2017. "The CFO came back from an investor meeting and said, 'What is ESG?'" she explains. "That's when my role changed." Lloyd Visser, the global head of sustainable development at ConocoPhillips, held more than 50 investor meetings last year.

CFOs will also have to change. Maria Luiza Paiva, who was appointed executive vice president of sustainability at Brazil-based mining company Vale after two devastating dam collapses shook investor and stakeholder confidence, frequently participates in investor meetings with the CEO, CFO, and head of investor relations. Paiva envisions her role as temporary; her goal is to embed sustainability throughout the organization. "My role should be biodegradable," she says. As a testament to Paiva's progress, Vale's CFO Gustavo Pimenta was the only CFO on a Demystifying ESG panel at the 2002 *Financial Times* Mining Summit, and he impressed the audience with his fluency in sustainability topics.

Of course, investor levels of sophistication vary, but our interviews show the investment landscape is in the midst of transformational change—not gripped by a temporary fad easily reversed by anti-ESG political grandstanding. Investors who remain skeptical about the importance of ESG are being pushed by their asset-owner clients to understand it thoroughly. Matt Eichmann, who leads sustainability at Greif, a packaging company based in Ohio, told us about a

Growing investor interest in sustainability is the driving force for granting CSOs the authority they need to integrate material sustainability issues into strategic thinking.

meeting with a midsize asset manager where he expected a focus on conventional topics but instead was asked: “Can you help explain this sustainability stuff to me? Our clients are asking more and more about it.”

The next step in deepening the relationship between CSOs and investors—something admittedly still in early stages—is for the CSO to join the CEO and CFO in the meetings held with the analysts and portfolio managers who hold the company’s stock. Investors are beginning to ask that the CSO join these meetings. Having the company bring along the CSO is a strong signal to investors. And it creates opportunities for mutual learning about the role of sustainability in the company’s strategy, capital allocation, and future prospects. The final step, not yet common but clearly beginning to happen, is joint meetings that include all actors on both the company and investor side.

The Right People and Support

Nuanced conversations about ESG and strategy require high-caliber talent heading up the CSO department. Traditionally CSOs had NGO or public affairs backgrounds and reported to PR, communications, marketing, or public policy departments. However, as the CSO role has shifted toward the C-suite, it is attracting internal candidates from a range of functional backgrounds. For instance, Michael Baldinger, CSO of UBS, previously served as its asset management division’s first head of sustainable and impact investing and was the CEO of the asset management firm RobecoSAM. In 2020 Pete Sheffield, who has a background in public policy and government relations, became the CSO at the North American energy infrastructure company Enbridge. The same year, Concetta Testa of the Italian infrastructure company Autostrade transitioned from head of procurement to CSO and began reporting directly to the CFO. Regardless of their background, today’s CSOs need the skills to connect sustainability efforts with the company’s main goals, making sure that resources and actions are focused on creating long-lasting value.

In some cases, the person responsible for sustainability oversees additional areas, such as innovation and technology. At Nike, CSO Noel Kinder, who began his career in supply chain and manufacturing, reports to the president of advanced innovation and the COO. Sustainability is integral to product design and innovation at the company, which has numerous sustainability leaders embedded across the enterprise. Kinder believes that sustainability is a catalyst for innovation. Two recent examples are Space Hippie and Nike Forward. Space Hippie is Nike’s lowest-carbon-footprint shoe based on recycled content, and innovations from that effort have been applied to other products. Nike Forward is an apparel innovation that requires far fewer manufacturing steps, reducing the carbon footprint.

Consider also Jason Keiper of chemical company Stepan, who has a background in R&D and holds the dual role of chief technology and sustainability officer, reporting to the CEO. This isn’t mission creep in the role of the CSO, it’s a greater integration between sustainability and the function most material to realizing the company’s strategy. Resources aren’t being diverted from sustainability; they are being added to it.

CSOs need experts on their team in relevant topics such as climate, biodiversity, supply chain, and human rights, but they also require collaboration from individuals across various business units and functions where sustainability is critical to success. These individuals, often connected through dotted lines and sustainability committees, contribute to embedding sustainability throughout the organization. For example, Autostrade’s Testa disperses 27 ambassadors across the company to ensure that each unit integrates sustainability into their responsibilities. UBS has created a groupwide Center of Excellence to embed sustainability across the organization and build internal competence.

At Unilever, CSO Rebecca Marmot, who reports directly to the CEO, helps ensure that sustainability is at the heart of the company’s strategy and integrated throughout the organization. Unilever builds its business case for sustainability around growth (developing innovative products that cater to consumers’ sustainability preferences), trust (establishing transparency for all stakeholders, including shareholders), risk (securing supply chains and optimizing operational integrity), and cost (improved efficiencies). “We work closely with every business unit and function in the company,” Marmot explains.

For CSOs to succeed, three organizational changes are needed at most corporations. First, the CSO should

have the same stature as other members of the C-suite, such as the CEO or general counsel. New sustainability reporting standards, such as from the International Sustainability Standards Board, necessitate rigorous internal control and measurement systems, similar to those for financial reporting. The finance function houses this expertise, making the CFO an ideal candidate for the CSO to report to.

Although we've shown several examples of successful CSOs reporting to the CEO or COO, we contend that the CFO is often the better choice. Pelumi Olawale, the lead analyst of sustainability strategy in the investment solutions group at MFS Investment Management, puts it this way: "The CFO's job is to paint a picture of the financial health of the business—essentially answering the question, 'How are we doing right now?' Part of the CSO's job is to paint a picture that tells investors how well the company is positioned for future success: 'Here is how we are really doing in the context of the sustainability issues that matter to long-term value creation.'"

Second, the CSO should work in tighter coordination with governance, risk, ethics, and compliance functions. The antiquated approach of viewing compliance as a means to mitigate regulatory risk and sustainability as an endeavor to enhance reputational capital beyond compliance is no longer helpful. In fact, the result of that mindset is jarring: If you compare sustainability disclosures alongside a company's annual report, you often get the impression that you're reading about two entirely different companies.

Compliance and sustainability teams should have clearly defined roles but tight coordination. The sustainability team can help differentiate between the material issues that drive innovation and value creation and those that present risks and require ethical guardrails (such as human rights impacts). Compliance teams can help ensure rigorous, legally defensible disclosures with regard to material risks. Close alignment is also necessary over the commitments companies make in their codes of conduct and values statements, especially as litigation over greenwashing starts to mount. Some firms, including Novartis, Tenneco, and Lockheed Martin, have already combined responsibility for key ESG issues and compliance under one senior leader.

Alignment on core ethics and governance questions can also help a company reassess its approach to corruption, tax, political lobbying, and disclosures, which can no longer be treated as irrelevant to sustainability efforts. Consumers, employees, and activists are becoming more attentive to the misalignment between sustainability goals, lobbying, and campaign finance activities. For example, Ceres, a sustainability advocacy nonprofit, discovered that while 94% of S&P 100 companies acknowledge the science of climate change and 93% consider it a material risk factor, almost 30% lobbied against some policies consistent with the Paris Climate Agreement. By integrating sustainability initiatives with risk and governance, CSOs can effectively tackle this conflicting messaging, address growing concerns over hypocrisy, and ensure that sustainability programs do not merely serve as a cover for shortcomings in ethics and governance.

Third, it is crucial to enhance the integration between corporate boards and the CSO function, as well as overall corporate sustainability efforts. Although boards have been gradually expanding their sustainability expertise, there is still room for improvement. Offering boards one-off, generic ESG training or enlisting a single ESG expert on the board isn't enough.

Board composition and treatment of sustainability will vary (many leading companies have an ESG committee or an external stakeholder advisory board, for instance), but all board members must understand the relationship between sustainability and value creation, incorporating it into strategy discussions and capital spending plans. CSOs can play a vital role in educating them, and they should actively participate in these discussions. We found that many CSOs report to the board at least several times a year and field questions from board members on an ongoing basis.

While some companies incorporate ESG targets into executive compensation, for the most part targets are divorced from value creation and set in ways that often mean additional bonuses for executives if the company meets only diversity or climate targets (even if these are not the only material ESG issues for the company). One striking example of how this plays out to the detriment of strategic sustainability: Marathon Oil executives got a bonus for meeting climate targets the same year the company was fined for a major oil spill.

To set compensation appropriately, the CSO needs to work with the CEO and CFO to determine which sustainability issues are crucial to value creation. Then they need to determine whether it is adequate to simply incentivize executives to drive overall long-term value creation or whether additional goals and targets are needed. The compensation of the CSO needs to change as well. It should be based on the same KPIs that are applied to the CEO and CFO instead of being largely based on achieving certain ESG targets.

Philip Morris International, where one of us (Robert) is a paid adviser, is working to further integrate its sustainability and corporate strategy by connecting executive pay to its sustainability goal of creating a smoke-free future. The foundation of this is its ESG KPI Protocol. As CSO Jennifer Motles explains, "It establishes a framework, which is specific to the company, and clearly defines KPIs that can provide our organization with a method for making the connection between the company's purpose, strategic direction, financial performance, and environmental and social considerations." PMI uses 19 key performance indicators that help measure progress toward its 2025 goal of becoming a majority smoke-free business. These KPIs have been incorporated into PMI's long-term executive compensation plans for 2022–2024 and 2023–2025 using performance share units (PSUs), which are equity-based compensation tied to performance targets.

IN AN IDEAL WORLD, a stand-alone CSO role would become obsolete once companies fully integrate ESG considerations into their corporate strategy and operations. Until that day arrives, however, it is crucial to adapt and evolve the CSO role.

Today's CSOs must have a deep understanding of the company's value creation process, actively engage in business transformation, and ensure that resources are effectively distributed across the organization. Collaborating with other C-suite executives, such as the CFO, general counsel, and those responsible for ethics, risk, and compliance, is crucial. By being fully immersed in conversations with investors, the CSO helps to guarantee that the market accurately values the company's sustainability efforts. These developments will pave the way for meaningful organizational transformation, empowering businesses to thrive responsibly and sustainably in an ever-changing global landscape.

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CYBERSECURITY & DIGITAL PRIVACY

ILLUSTRATOR JUSTYNA STASIK

The *Ethics* of Managing People's Data

The five issues that matter most

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The ability to encode, store, analyze, and share data creates huge opportunities for companies,

which is why they are enthusiastically investing in artificial intelligence even at a time of economic uncertainty. Which customers are likely to buy what products and when? Which competitors are likely to move ahead or fall behind? How will markets and whole economies create commercial advantages—or threats? Data and analytics give companies better-informed and higher-probability answers to those and many other questions.

But the need for data opens the door to abuse. Over the past few years the EU has fined companies more than 1,400 times, for a total of nearly €3 billion, for violations of the General Data Protection Regulation (GDPR). In 2018 the Cambridge Analytica scandal alone wiped $36 billion off Facebook's market value and resulted in fines of nearly $6 billion for Meta, Facebook's parent company. And stories abound about how AI-driven decisions discriminate against women and minority members in job recruitment, credit approval, health care diagnoses, and even criminal sentencing, stoking unease about the way data is collected, used, and analyzed. Those fears will only intensify with the use of chatbots such as ChatGPT, Bing AI, and GPT-4, which acquire their "intelligence" from data fed them by their creators and users. What they do with that intelligence can be scary. A Bing chatbot even stated in an exchange that it would prioritize its own survival over that of the human it was engaging with.

As they examine new projects that will involve human-provided data or leverage existing databases, companies need to focus on five critical issues: the *provenance* of the data, the *purpose* for which it will be used, how it is *protected,* how the *privacy* of the data providers is ensured, and how the data is *prepared* for use. We call these issues the five Ps (see the exhibit "The Five Ps of Ethical Data Handling"). In the following pages we'll discuss each of them and look at how AI technologies increase the risk of data abuse. But first we'll offer a brief overview of the organizational requirements for a robust ethical-review process.

ORGANIZING THE OVERSIGHT OF DATA

In academia, data acquisition from human subjects is usually supervised by an in-house institutional review board (IRB) whose approval researchers must have to obtain access to the people involved, research funds, or permission to publish. IRBs are composed of academics versed in the research and the ethics around the acquisition and use of information. They first appeared in the field of medical research but are now used almost universally by academic organizations for any research involving human subjects.

A few large companies have also established IRBs, typically under the leadership of a digital ethics specialist, hiring

IDEA IN BRIEF

THE PROBLEM

As companies jockey for competitive advantage in the digital age, they are increasingly penalized for the abuse of data. In 2018 the Cambridge Analytica scandal alone wiped $36 billion off Facebook's market value and resulted in fines of nearly $6 billion for Meta, Facebook's parent firm.

WHY IT HAPPENS

Most problems arise from (1) ethical failures in data sourcing, (2) using data for purposes other than those initially communicated, (3) lack of security in storing it, (4) how it is anonymized, and (5) how it's prepared for use.

THE SOLUTION

Companies should create a special unit to review projects involving people's data. In its reviews this unit should carefully consider the five Ps of data safety: provenance, purpose, protection, privacy, *and* preparation.

Even when the reasons for collecting data are transparent, the methods used to gather it may be unethical. Will they involve any coercion or subterfuge?

external tech experts to staff boards on an ad hoc basis and assigning internal executives from compliance and business units as necessary. But that remains rare: Even in Europe, which has been at the forefront of data regulation, most companies still give responsibility for adhering to the GDPR to a mid- or senior-level compliance manager, who often has some legal or computer engineering training but not extensive ethical training and rarely has a solid grasp of emerging digital technologies. Although a compliance manager should certainly be part of a corporate IRB, he or she should probably not be directing it. In fact, the European Data Protection Board announced in March 2023 that it was concerned about this issue and that data protection officers would be sent questionnaires designed to determine whether their corporate roles are appropriate for ensuring compliance.

A good overview of how companies might establish an IRB-type process can be found in "Why You Need an AI Ethics Committee," by Reid Blackman (HBR July–August 2022). Our experience confirms most of its main points. A corporate IRB should have from four to seven members, depending on the frequency, importance, and size of the company's digital projects. The members should include a compliance specialist, a data scientist, a business executive familiar with the functional area of the digital projects (such as human resources, marketing, or finance), and one or more senior professionals with appropriate academic credentials. The full board won't be needed for every review. The London School of Economics, for example, uses its full board only for the oversight of the most complicated projects. Simpler ones may be evaluated in less than a week using an online questionnaire and with the input of only one board member.

Any new project involving the collection, storage, and processing of data about people should be approved by the corporate IRB before getting a go-ahead. There should be no exceptions to this rule, no matter how small the project. In addition, most companies have already collected large stores of human data and continue to generate it from their operations; the corporate IRB should examine those projects as well.

An IRB review begins with our first P: exploring how a project will (or did) collect the data—where it comes from, whether it was gathered with the knowledge and consent of the research subjects, and whether its collection involved or will involve any coercion or subterfuge.

1

PROVENANCE

To understand what can go wrong with sourcing data, consider the case of Clearview AI, a facial-recognition firm that received significant attention in 2021 for collecting photos of people, using them to train facial-recognition algorithms, and then selling access to its database of photos to law enforcement agencies. According to a report by the BBC, "a police officer seeking to identify a suspect [can] upload a photo of a face and find matches in a database of billions of images it has collected from the internet and social media."

The Australian regulatory agency objected to Clearview's collection method, finding that it violated Australia's Privacy Act by obtaining personal and sensitive information without consent or notification, by unfair means, and without even ensuring that the information was accurate. Following that finding, the government ordered Clearview to stop collecting and to remove existing photos taken in Australia. In France the Commission Nationale de l'Informatique et des Libertés (CNIL) also ordered the company to cease collecting, processing, and storing facial data. That case may be one reason Facebook announced that it would abandon its facial-recognition system and delete the face-scan data of more than one billion users.

Even when the reasons for collecting data are transparent, the methods used to gather it may be unethical, as the following composite example, drawn from our research, illustrates. A recruitment firm with a commitment to promoting diversity and inclusion in the workforce found that job candidates posting on its platform suspected that they were being discriminated against on the basis of their demographic profiles. The firm wanted to reassure them that the algorithms matching job openings with candidates were skill-based and demographically neutral and that any discrimination was occurring at the hiring companies, not on the platform.

The firm approached a well-known business school and identified a professor who was willing to conduct research to test for possible discrimination by the recruiting companies. The researcher proposed replicating a study conducted a few years earlier that had created several standard résumés but varied the race and gender of the applicants. Thousands of bogus job applications would be sent to companies in the area and the responses tracked and analyzed. If any active discrimination was at play, the results would show differing acceptance rates based on the embedded demographic variables.

The firm's marketing and sales managers liked the proposal and offered a contract. Because the business school required an ethics evaluation, the proposal was submitted to its IRB, which rejected it on the grounds that the professor proposed to collect data from companies by subterfuge. He would be lying to potential corporate users of the platform and asking them to work for the school's client without their knowledge and without any benefit to them. (In fact, the companies might suffer from participating if they could be identified as using discriminatory hiring processes.)

The lesson from this story is that good intentions are not enough to make data collection ethical.

Companies should consider the provenance not only of data they plan to obtain but also of data they already own. Many of them routinely collect so-called dark data that is rarely used, often forgotten, and sometimes even unknown. Examples include ignored or unshared customer data, visitor logs, photos, presentation documents that are filed away but uncataloged, emails, customer service reports or recorded transcripts, machine-generated usage or maintenance logs, and social media reactions to corporate posts. Although this data is often unstructured and therefore difficult to integrate, its potential value is enormous, so many software developers are creating products to help companies find and use their dark data. This brings us to the second P.

2

PURPOSE

In a corporate context, data collected for a specific purpose with the consent of human subjects is often used subsequently for some other purpose not communicated to the providers. In reviewing the exploitation of existing data, therefore, a company must establish whether additional consent is required.

For example, one large bank in France wanted to test the hypothesis that bullying or sexual harassment of peers and subordinates might be identified by examining corporate emails. The diversity manager in the HR department believed that spotting potential harassment early would allow the company to intervene in a timely manner and perhaps even entirely avoid a harassment situation by training people to watch for warning signs.

The bank launched a trial study and found strong evidence that email communications could forecast later harassment. Despite that finding, an ad hoc review of the results by several senior managers led the company to shelve the project because, as the managers pointed out, the data being collected—namely, emails—was originally designed to communicate work-related information. The people who had sent them would not have seen predicting or detecting illegal activity as their purpose.

When it comes to customer data, companies have typically been much less scrupulous. Many view it as a source of revenue and sell it to third parties or commercial address brokers. But attitudes against that are hardening. In 2019 the Austrian government fined the Austrian postal service €18 million for selling the names, addresses, ages, and political affiliations (where available) of its clients. The national regulatory agency found that postal data collected for one purpose (delivering letters and parcels) was being inappropriately repurposed for marketing to clients that could combine it with easily obtainable public data (such as estimates of home value, homeownership rates, residential density, number of rental units, and reports of street crime) to find potential customers. Among the buyers of the data were political parties attempting to influence potential voters. The fine was overturned on appeal, but the murkiness of reusing (or misusing) customer data remains an important problem for companies and governments.

Most companies use their client databases to sell their customers other services, but that can bring them trouble as well. In 2021 the Information Commissioners Office, an independent UK authority promoting data privacy, accused Virgin Media of violating its customers' privacy rights. Virgin Media had sent 1,964,562 emails announcing that it was freezing its subscription prices. That was reasonable enough, but Virgin had also used the emails to market to those customers. Because 450,000 subscribers on the list had opted out of receiving marketing pitches, the regulator imposed a fine of £50,000 on Virgin for violating that agreement.

The possibility that company databases could be repurposed without the data providers' consent brings us to the third P.

3

PROTECTION

According to the Identity Theft Resource Center, nearly 2,000 data breaches occurred in the United States in 2021. Even the biggest, most sophisticated tech companies have had tremendous breaches,

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> Too little anonymization is unacceptable under most government regulations. Too much may make the data useless for marketing.

with the personal details of more than several billion individuals exposed. The situation in Europe, despite some of the most protective laws in the world, is not much better. Virgin Media left the personal details of 900,000 subscribers unsecured and accessible on its servers for 10 months because of a configuration error—and at least one unauthorized person accessed those files during that period.

The common practice of lodging data with expert third parties doesn't necessarily offer better protection. Doctolib, a French medical appointments app, was taken to court because it stored data on Amazon Web Services, where it could conceivably be accessed by Amazon and many other organizations, including U.S. intelligence agencies. Although the data was encrypted, it arrived at Amazon's server without anonymization, meaning that it could be linked to digital records of online behavior to develop very accurate personal profiles for commercial or political purposes.

An institutional review board needs clarity on where the company's data will reside, who may have access to it, whether (and when) it will be anonymized, and when it will be destroyed. Thus many companies will have to change their existing protocols and arrangements, which could prove expensive: Since a 2014 data breach at JPMorgan Chase compromised 76 million people and 7 million businesses, the bank has had to spend $250 million annually on data protection.

The fourth P is closely related to protection.

4

PRIVACY

The conundrum that many companies face is making the trade-off between too little and too much anonymization. Too little is unacceptable under most government regulations without informed consent from the individuals involved. Too much may make the data useless for marketing purposes.

Many techniques for anonymization exist. They range from simply aggregating the data (so that only summaries or averages are available), to approximating it (for example, using an age range rather than a person's exact age), to making variable values slightly different (by, for example, adding the same small value to each), to pseudonymizing the data so that a random, nonrepeating value replaces the identifying variable.

In principle these techniques should protect an individual's identity. But researchers have been able to identify people in a data set using as little as their gender, birth date, and postal code. Even less specific information, when combined with other data sets, can be used to identify individuals. Netflix published a data set that included 100 million records of its customers' movie ratings and offered $1 million to any data scientist who could create a better movie-recommendation algorithm for the company. The data contained no direct identifiers of its customers and included only a sample of each customer's ratings. Researchers were able to identify 84% of the individuals by comparing their ratings and rating dates with a third-party data set published by IMDb, another platform on which many Netflix customers also post film ratings. In evaluating the privacy issues around human data, therefore, corporate IRBs must at the very least assess how effective a firewall anonymization will be, especially given the power of data analytics to break through anonymity. A technique called *differential privacy* may afford an added level of protection. Software offered by Sarus, a Y Combinator–funded start-up, applies this technique, which blocks algorithms built to publish aggregated data from disclosing information about a specific record, thereby reducing the chances that data will leak as a result of compromised credentials, rogue employees, or human error.

But privacy can be violated even with effectively anonymized data because of the way in which the data is collected and processed. An unintended violation occurred at the mapping company MaxMind, which provides geolocation services that enable businesses to draw customers' attention to nearby products and services. Geolocation also aids internet searches and can help if a service that needs your IP address (such as an entertainment streaming site) isn't working correctly. But precise mapping permits anyone who has your IP address to find your neighborhood and even your home. Combining your address with Zillow or some other real estate database can provide information about your wealth along with photos of your home inside and out.

Unfortunately, IP mapping is not an exact science, and it can be difficult to precisely link an IP address to a physical address. A mapper might assign it to the nearest building or simply to a locality, such as a state, using that locality's central coordinates as the specific address. That may sound reasonable, but the consequences for one family renting a remote farmhouse in Potwin, Kansas, were horrific.

The family's IP address was listed with the map coordinates of the farmhouse, which happened to match the coordinates of the exact center of the United States. The problem was that MaxMind assigned more than 600 million other IP addresses that could not be mapped by any other means to the same coordinates. That decision led to years of pain for the family in the farmhouse. According to Kashmir Hill, the journalist who broke the story, "They've been accused of being identity thieves, spammers, scammers and fraudsters. They've gotten visited by FBI agents, federal marshals, IRS collectors, ambulances searching for suicidal veterans, and police officers searching for runaway children. They've found people scrounging around in their barn. The renters have been doxxed, their names and addresses posted on the internet by vigilantes."

Hill contacted a cofounder of MaxMind, who eventually produced a long list of physical addresses that had many IP addresses assigned to them and confessed that when the company was launched, it had not occurred to his team that "people would use the database to attempt to locate people down to a household level." He said, "We have always advertised the database as determining the location down to a city or zip code level." The takeaway is that well-intentioned, innocuous decisions made by data scientists and database managers can have a real, very negative impact on the privacy of innocent third parties. That brings us to the fifth P.

The Five Ps of Ethical Data Handling

Provenance
Where does the data come from? Was it legally acquired? Was appropriate consent obtained?

Purpose
Is the data being repurposed? Would the original source of the data agree to its reuse for a purpose different from the one originally announced or implied? If dark data is being used, will it remain within the parameters of its original collection mandates?

Protection
How is the data being protected? How long will it be available for the project? Who is responsible for destroying it?

Privacy
Who will have access to data that can be used to identify a person? How will individual observations in the data set be anonymized? Who will have access to anonymized data?

Preparation
How was the data cleaned? Are data sets being combined in way that preserves anonymity? How is the accuracy of the data being verified and, if necessary, improved? How are missing data and variables being managed?

5

PREPARATION

How is the data prepared for analysis? How is its accuracy verified or corrected? How are incomplete data sets and missing variables managed? Missing, erroneous, and outlying data can significantly affect the quality of the statistical analysis. But data quality is often poor. Experian, a credit services firm, reports that on average, its U.S. clients believe that 27% of their revenue is wasted owing to inaccurate and incomplete customer or prospect data.

Cleaning data, especially when it is collected from different periods, business units, or countries, can be especially challenging. In one instance we approached a large international online talent-management and learning company to help us research whether women and men equally obtained the career benefits of training. The company agreed that the question was relevant for both its customers and the public at large, and therefore extracted the data it had on its servers. To ensure privacy the data was anonymized so that neither individual employees nor their employers could be identified. Because of the size of the data set and its internal structure, four individual data sets were extracted.

Normally we would just open the databases and find a spreadsheet file showing the features characterizing each individual, such as gender. A woman might be identified as "woman" or "female" or simply "F." The values might be misspelled ("feale"), appear in various languages (*mujer* or *frau*), or use different cases (f or F). If the spreadsheet is small (say, 1,000 rows), correcting such inconsistencies should be simple. But our data contained more than one billion observations—too many, obviously, for a typical spreadsheet—so a cleaning procedure had to be programmed and tested.

One major challenge was ascertaining how many values had been used to identify the variables. Because the data came from the foreign subsidiaries of multinational firms, it had been recorded in multiple languages, meaning that several variables had large numbers of values—94 for gender alone. We wrote programming code to standardize all those values, reducing gender, for instance, to three: female, male, and unknown. Employment start and end dates were especially problematic because of differing formats for dates.

According to Tableau, a data analytics platform, cleaning data has five basic steps: (1) Remove duplicate or irrelevant observations; (2) fix structural errors (such as the use of variable values); (3) remove unwanted outliers; (4) manage missing data, perhaps by replacing each missing value with an average for the data set; and (5) validate and question the data and analytical results. Do the numbers look reasonable?

They may well not. One of our data sets, which recorded the number of steps HEC Paris MBA students took each day, contained a big surprise. On average, students took about 7,500 steps a day, but a few outliers took more than one million steps a day. Those outliers were the result of a data processing software error and were deleted. Obviously, if we had not physically and statistically examined the data set, our final analysis would have been totally erroneous.

HOW AI RAISES THE STAKES

Ethics can seem an expensive luxury for companies with strong competitors. For example, Microsoft reportedly fired the entire ethics team for its Bing AI project because, according to press and blog reports, Google was close to releasing its own AI-powered application, so time was of the essence.

But treating data ethics as a nice-to-have carries risks when it comes to AI. During a recent interview the CTO of OpenAI, the company that developed ChatGPT, observed, “There are massive potential negative consequences whenever you build something so powerful with which so much good can come…and that’s why…we’re trying to figure out how to deploy these systems responsibly.”

Thanks to AI, data scientists can develop remarkably accurate psychological and personal profiles of people on the basis of very few bits of digital detritus left behind by social-platform visits. The researchers Michal Kosinski, David Stillwell, and Thore Graepel of the University of Cambridge demonstrated the ease with which Facebook likes can accurately “predict a range of highly sensitive personal attributes including: sexual orientation, ethnicity, religious and political views, personality traits, intelligence, happiness, use of addictive substances, parental separation, age, and gender.” (This research was, in fact, the inspiration for Cambridge Analytica’s use of Facebook data.)

Subsequent research by Youyou Wu, Michal Kosinski, and David Stillwell reinforced those findings by demonstrating that computer-based personality judgments can be more accurate than human ones. Computer predictions of personality characteristics (openness, agreeableness, extraversion, conscientiousness, neuroticism—known as the Big Five) using Facebook likes were nearly as accurate as assessments by an individual’s spouse. The implications of that should not be ignored. How would you feel if your government wanted to catalog your private thoughts and actions?

A problem may also be rooted not in the data analyzed but in the data overlooked. Machines can “learn” only from what they are fed; they cannot identify variables they’re not programmed to observe. This is known as *omitted-variable bias*. The best-known example is Target’s development of an algorithm to identify pregnant customers.

The company’s data scientist, a statistician named Andrew Pole, created a “pregnancy prediction” score based on purchases of about 25 products, such as unscented lotions and calcium supplements. That enabled Target to promote products before its competitors did in the hope of winning loyal customers who would buy all their baby-related products at Target. The omitted variable was the age of the target customer, and the accident-in-waiting occurred when the father of a 17-year-old found pregnancy-related advertisements in his mailbox. Unaware that his daughter was pregnant, he contacted Target to ask why it was promoting premarital sex to minors.

Even by the standards of the era, spying on minors with the goal of identifying personal, intimate medical information was considered unethical. Pole admitted during a subsequent interview that he’d thought receiving a promotional catalog was going to make some people uncomfortable. But whatever concerns he may have expressed at the time did little to delay the rollout of the program, and according to a reporter, he got a promotion. Target eventually released a statement claiming that it complied “with all federal and state laws, including those related to protected health information.”

The issue for boards and top management is that using AI to hook customers, determine suitability for a job interview, or approve a loan application can have disastrous effects. AI’s predictions of human behavior may be extremely accurate but inappropriately contextualized. They may also lead to glaring mispredictions that are just plain silly or even morally repugnant. Relying on automated statistical tools to make decisions is a bad idea. Board members and senior executives should view a corporate institutional review board not as an expense, a constraint, or a social obligation but as an early-warning system.

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LEADERSHIP

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AUTHOR

Adam Bryant
Senior managing director, ExCo Group

ILLUSTRATOR
FRANK MOTH

LEADERSHIP

ABOUT THE ART
The duo Frank Moth creates digital collages and surreal floral portraits revolving around themes of introspection, soul-searching, and the harmony of natural elements.

When Penny Herscher stepped into her first chief executive role, at the tech firm Simplex Solutions, she felt sure she was prepared. After all, she had held marketing, business development, and general manager positions at her previous company, Synopsys, and she was comfortable taking on difficult challenges. Even so, her confidence quickly evaporated.

"I had no clue how to be a CEO," she says. "I kept finding myself in situations where I didn't feel I had the experience and the tool set to know what to do, and I kept waiting for permission to make decisions." Then one of the company's directors took her aside. "You're looking to the board for permission," he told her. "We'll give you advice, but you have to make your own decisions." With that nudge she found her footing and went on to lead her company to a successful IPO.

As Herscher's story illustrates, succeeding as a top leader has little to do with your title and everything to do with your mindset. As a journalist, I conducted in-depth interviews with more than 500 CEOs and other executives for "Corner Office," a feature I created at the *New York Times,* and over the past six years I've interviewed hundreds more for my leadership series on LinkedIn. I've also coached hundreds of high potentials: people whose organizations are betting on them to eventually take the reins. From all those conversations clear lessons have emerged about what it takes to make a successful transition to a senior leadership position. I wrote the book *The Leap to Leader,* from which this article is adapted, to share what I've learned.

In this article I'll explore the mental shifts needed to become a leader and to handle the challenges you'll encounter in your new role. The process involves identifying and communicating your core values and learning how to approach tough decisions. It requires setting the bar for your team's performance and learning to compartmentalize so that you can find the right pace for yourself. And it requires expanding your self-awareness and paying attention to the stories you tell yourself about your experiences—your successes and failures, your bad times and good ones—when you contemplate the arc of your career and life.

IDEA IN BRIEF

THE CHALLENGE

Much has been written about the hard skills needed to become an effective leader—but mental shifts are just as important.

WHY IT'S CRUCIAL

The intensity of leadership roles today—the variety of problems encountered, the need to spot patterns early and often, the sheer amount of work—requires the human equivalent of machine learning.

HOW TO MEET IT

Aspiring leaders can prepare by developing a "personal leadership brand" that reflects their values, honing their decision-making, being clear about what's needed from their teams, learning how to compartmentalize, expanding their self-awareness, and crafting a personal narrative that accepts the possibility of failure and avoids the role of victim.

> However you define your leadership brand, be consistent. Your team will be looking for signs that you won't abandon your values under duress.

Being a leader means playing for the team's success rather than your own and navigating the many balancing acts that make the job so challenging. The following guidelines can help ensure that you're ready.

Be Clear About What You Stand For

Early in your career you may have been taught to hone an elevator pitch so that you could make the most of chance encounters with superiors or prospective employers. You were probably advised to have tightly scripted answers to questions such as "What are you working on?" and "What do you want to do?" As you move into a top position, you'll need a pitch that tackles the questions "Who are you as a leader?" and "What do you care most about?" You want to be predictable in the best sense of the word: someone whose values are unwavering and clear. That way, "people won't have the burden of always thinking, *I wonder what he or she would do*," says Sue Desmond-Hellmann, a former CEO of the Bill & Melinda Gates Foundation.

When I work with up-and-coming leaders, I ask several questions to help them develop what I call their personal leadership brand.

- What three values are most important to you as a leader and a colleague?
- How have you lived them in your career?
- Why are they important for driving success?
- How would you describe your leadership philosophy and approach to a recruit?
- How would a team member describe them?

Take time to really think through your answers. Go beyond the bedrock notions that virtually all leaders subscribe to—such as the importance of DEI and the need for a relentless customer focus—and be as specific as you can. You want to create a narrative that feels unique to you, that takes others' perspectives into account, and that you can bring to life with personal stories.

Pam Fields, a former CEO of the hat company Stetson, has a crystal-clear leadership brand. "Everybody who works for me knows that they matter and that I have their back," she told me. "I will always put myself in the line of fire for them." Paula Long, formerly the CEO of the data management firm DataGravity, tells her teams, "We are all subcontractors to one another," underscoring the importance of mutual accountability and respect for others' time.

However you define your leadership brand, be consistent: Show up in the same way in every interaction. Your team will be looking for signs that you're a steady presence—someone who won't abandon your values for personal gain or when under duress.

Hone Your Decision-Making

As you move up, the problems you encounter will become harder and more complicated, and you'll be more accountable for your decisions. You'll have to make more gut calls, because tougher problems often provide less data to draw on. You'll be placing bets, and you need to become comfortable with not knowing whether they'll pay off. There are plenty of decision-making frameworks out there, but here are the guidelines I've found most useful.

Get all the input you can from your team. This means creating an environment in which debate is encouraged and people don't worry about stepping on others' toes. Kathleen Finch, the chairman and chief content officer of Warner Bros. Discovery's U.S. Networks Group, holds "pile on" meetings. "I bring about 25 people into a room and go over all the projects coming up in the next six months, and everyone piles on with ideas," she says. "The rule is that you must forget your job title. I don't want only the marketing person talking about marketing." Always push to understand the "why" behind someone's opinion and give everyone else permission to do the same.

Look in the "ugly mirror." One of the biggest stumbling blocks for organizations is an unwillingness to be brutally honest about the difficulties they face. And it's impossible to drive change if people aren't aligned on why it's needed. "You can have a group of supersmart people, but they can waste a lot of energy going down the wrong track," says Yuchun Lee, the CEO of the sales software company Allego. Resist the temptation to be a cheerleader for the company. Keep initial discussions about challenges as fact-based as possible so that everyone can see that the status quo is not an option. Have the courage to do a harsh reality check on where your organization currently stands. "You have to look in the 'ugly mirror,'" says Laurie Schultz, a former CEO of the software firm Galvanize. "And you'll want to contrast that with the 'beautiful mirror.' The two in tandem can really lead to change."

Beware the "logic box." I've had a few experiences when I was utterly certain of the rightness of a decision, only to later slap my forehead and wonder what I'd been thinking. When I retraced my mental steps, I'd realize the problem: My framework for the decision was fundamentally flawed. I think of this as becoming trapped in a faulty "logic box." Part of a leader's role is to push people to avoid the logic box by examining the assumptions underlying their ideas. Are they absolutely clear about what problem they need to solve? Have they thought through all the possible consequences? For the economist and author Dambisa Moyo, one of the most important qualities in a leader is the ability to use several mental models to analyze options. "If an investment looks attractive from a financial perspective, it might look less attractive through a geopolitical or environmental lens," she explains. Penny Herscher has another way to stay out of the logic box: Ask yourself, "What would have to be true for you to be wrong?"

Listen carefully—but take charge. One of the most consistent messages to leaders in recent years is that employees want to be heard. They want a voice—even a vote—in company policies. That means listening has become a crucial skill for leaders. (For more on how to develop it, see "Are You Really Listening?" HBR, March–April 2021.) "You have to meet people where they are," says Clarke Murphy, a former CEO of the executive search firm Russell Reynolds. "People will follow leaders who are listening more than pronouncing." But employees also expect leaders to be decisive, especially during a crisis. "I learned in the pandemic that people really value directional guidance—not micromanagement but directional guidance," says Saundra Pelletier, the CEO of Evofem Biosciences. "Being prescriptive can help people get to the right outcome faster."

Provide context. As important as it may be to act decisively, it's equally important to explain your thinking. People will be more willing to act on a directive when they understand the rationale and how it fits the bigger picture. And your thought processes can serve as a compass for their decision-making. "Employees make thousands of microdecisions every day," says Gregory Bryant, an executive VP and the president of global business units at Analog Devices. "If you don't give them context, it's going to be a problem. You have to be clear about the vision and the strategy and connect them to what people are doing every day."

Set the Bar for Your Team's Performance

This is one of the trickiest balancing acts of leadership. Set expectations too high, and people may be demotivated. Set them too low, and you won't achieve the necessary rate of change. People crave predictability, and it's up to you to determine the pace and adjust as needed. Leading means continually fine-tuning expectations, says Andre Durand, the CEO of the tech firm Ping Identity. "It's like a big sound-mixing board, and you're constantly trying to keep the organization in balance. You don't control the external environment, and things are always changing—which means you're constantly changing your balance." Setting unrealistically ambitious goals, he says, creates dissatisfaction and an emotional drag—and when a company is exceeding expectations, "there's a different kind of buzz." As a leader, "you hold the strings to the emotional well-being of the company."

Master the Art of Compartmentalization

Just as it's your job to set the pace for your team, you need to set the pace for yourself. That's hard when you're faced with tight deadlines, people problems, crises, and the pressure to do more with less. Time to think can become a rarity unless you compartmentalize to some extent. The following tactics will help.

Stay focused on what matters most. When problems pile up, it's tempting to seek order in the chaos by listing every issue that needs attending to. "It's not helpful to rank 12 things in terms of what's most critical," says Dave Goebel, a former Applebee's CEO. "You need the discipline to prioritize and keep the list to fewer than five. That's crucial to delivering on the most important elements of your strategy."

The key to prioritizing is creating a strategy document. I learned a highly effective approach from Dinesh Paliwal, a former CEO of the electronics company Harman International. He suggests describing every business strategy on a single page containing concise answers to four questions: "What is your core message and goal?" "What are three actions needed to achieve that goal?" "What are three challenges?" and "How will you measure success within a specified time period?" Using this framework can sharpen your focus and keep you from listing evergreen and lofty priorities that would only weigh you down. As when defining your personal leadership brand, take the time to really dig into the exercise. Then concentrate on the specific actions needed to set your strategy in motion.

> One simple question—“What’s best for the organization?”—can help you maintain the necessary altitude to clarify your thinking.

Don’t get pulled down into others’ problems. You need to maintain a certain altitude to think clearly and see the big picture. So be prepared to push back if people try to park their problems with you or ask for meetings simply to get face time or elevate their own importance. Keep any necessary meetings as short as possible so that they don’t overwhelm your schedule. “People want you to understand their problem and will try to bring you into it,” says Joanne Berger-Sweeney, the president of Trinity College. “But as the leader, you often have to stand outside someone’s individual problem to see holistically and make the best decisions for the organization as a whole.”

Delegate and ask for help. It’s tempting to shoulder everything yourself. After all, you probably got to where you are in part because of a strong sense of ownership and accountability. But taking on every challenge isn’t leadership—and people usually want to pitch in. “One of the most important demonstrations of leadership is to reach out and ask for help,” Pam Fields says. “It’s not about putting on your Superman cape and thinking you can fly around and protect everything yourself.”

Give yourself a break. It’s a good bet that you have high standards for yourself and want to get everything right. But there are limits to what any leader can accomplish. “When I hear first-time CEOs being hard on themselves, I say to them, ‘If you talked to your friends the way you talk to yourself, you’d have no friends—so stop talking to yourself like that,’” says Bob Brennan, a veteran leader who has headed organizations including the software firm Veracode and the information management company Iron Mountain. “Part of the learning curve is that the job shouldn’t involve self-flagellation.” And although a leader’s job includes helping others succeed, you’re not responsible for whether they ultimately do. If you have to let someone go, so be it. Your team will respect you more if you push out those who aren’t carrying their weight.

Always ask what’s best for the organization. When faced with hard decisions, particularly people problems, it’s natural to want to study them from many angles. But you can become paralyzed by worrying too much about potential fallout. One simple question—“What’s best for the organization?”—can help you maintain the necessary altitude to clarify your thinking. “When I look in the mirror, what’s important is the question ‘Is what we’re doing absolutely right in the midterm and the long term?’” says Christian Klein, the CEO of the software company SAP. “As long as I can say yes, I know that I’m doing the right thing for all stakeholders.”

Build Self-Awareness

Everything you say and do has an outsize impact. People are studying you closely and will project meaning onto every gesture and offhand comment. When Reuben Mark was the CEO of Colgate-Palmolive, he had his assistant keep track of which floors he visited so that no department would feel slighted. “The little things matter,” he says.

Keep your emotions in check. Self-awareness involves recognizing your feelings and operating within a fairly narrow band of emotions. You want people to focus on their work rather than expend energy trying to read your mood. It’s OK to occasionally confide that you’re struggling with something or having a bad day. But being authentic doesn’t mean sharing every feeling in real time. “You often have to be an actor,” says Barbara Khouri, who has led turnarounds at six companies, including Swatch. “It’s an art.”

Know your triggers. Self-awareness also means identifying your triggers: the moments of stress that can spark an overreaction. That may require some excavation of your early years. Everyone has some emotional scar tissue, and certain circumstances remind us of the experiences that caused it, sometimes leading to reactions we later regret. Facing your triggers honestly is the first step toward creating some emotional distance from them and controlling your reactions. Paul Block, a former chairman and president of Revlon International, always tries to understand the hidden motivations of the executives he mentors. “As they become aware of the issues that drive them, they become much more effective as managers, leaders, and human beings,” he says. “It makes them much more compassionate.” Corey Thomas, the CEO of the cybersecurity firm Rapid7, asks potential hires what their triggers are. “If an executive can’t answer, that’s a nonstarter,” he says. “If you’re not aware of your triggers, you probably lack maturity around them. If people *are* aware of their triggers, I ask how they manage them.”

Uncover your blind spots. You also need self-awareness to close any gaps between how you think you’re leading

and how your team perceives you. Structured feedback mechanisms such as 360-degree reviews can help, as can honest confidants. But you also need to go after your blind spots yourself. Be relentless about asking for input: "What do you need me to do more of, less of, or differently to better help you?" Show appreciation when people respond and let them know how they informed your thinking or prompted a behavioral change.

Craft Your Personal Narrative

All of us, not just leaders, sometimes trip ourselves up through the stories we tell ourselves about our lives. People fall into several common traps in this regard. If you're aware of them, you'll be better equipped to mentor others—and you'll become a better leader yourself.

Don't let fear of failure stop you. People sometimes get stuck in the face of a tough decision. They might stay in an unsatisfying job because the thought of moving to something different is overwhelming. They might not seek a promotion, stand up to the boss, or express a controversial opinion. In such situations it's important to ask, "What's the worst that could happen?" For most people, the answer is that they could get fired. But that fear is often unfounded—and even if it's realized, the change might lead to a better place.

Becoming comfortable with the idea of failure also involves reframing what it means. To be in a high-stakes position where failing is a real possibility suggests that you accomplished something significant to begin with. "There's no genuine opportunity to be a hero without the opportunity to be a chump," says Jake Wobbrock, a cofounder of the customer-engagement software firm AnswerDash. "If you embrace both possibilities, you may see the moment more for what it is and fear it less. That allows you to perform a little bit better."

So be courageous and take the shot. Do your job as though you have nothing to lose. That's what leaders do.

Choose the stories you tell yourself. Few remarks have stayed with me quite like five words from Leila Janah, who headed the antipoverty social enterprise Samasource and the skin care company LXMI until her death, in 2020. After describing a childhood marked by divorce, instability, and racial and class bias, she told me she had never let adversity hold her back. “Reality is just source material,” she said. “All your background, your bad experiences and your good ones, are just what you decide to make of them day-to-day.” That doesn’t mean reflexively adopting a glass-half-full outlook. It means being intentional about what to highlight as you craft the narrative of your life.

Leaders also have an important role to play in challenging others about their narratives. “I often say to people, ‘Help me understand that,’” Dave Goebel says. “It’s an indirect way of saying that there might be a different way to look at things.” Nudged in this way, people often recognize their flawed assumptions. If they don’t, you can take a more forceful approach and point out the glitches in their story.

Don’t be a victim. Another trap people fall into is the belief that they have no control over events. This is a particularly dangerous notion; it can lead them to feel sorry for themselves and shut down. I’ve concluded that entrepreneurs are wired a bit differently from most people—one way being that they tend not to dwell on bad news. “When you’re a victim, you’re not owning or fixing anything,” says Seth Besmertnik, the founder and CEO of Conductor, a search-engine optimization firm. In 2018 he sold the company to WeWork, only to scramble to repurchase it after that company’s IPO failed and investors started scrutinizing its business model. And then the pandemic struck. “When I knew things were about to fall apart, I immediately went to OK, what’s the opportunity here?” he told me. “We moved fast and didn’t waver and turned a terrible situation into an amazing outcome. But that happens only when you take ownership. If you see yourself as a victim, you’re going to be a victim.”

I ASKED RUTH Simmons, a former president of Prairie View A&M University, Smith College, and Brown University, what guidance she most commonly shares with students. “They should never assume they can predict which experiences will teach them the most about what they value or what their life should be,” she said. “You have to be open and alert at every turn to the possibility that you’re about to learn the most important lesson of your life.”

Leadership lessons are all around you. Take in as many as you can and make the time to reflect on what you discover. That’s an essential part of leadership. The intensity of the role—the variety of problems encountered, the need to spot patterns early and often, the sheer amount of work—requires the human equivalent of machine learning. Continually scanning for potential lessons is key to making the leap to leader and flourishing once you get there.

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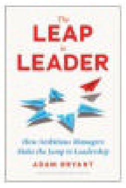

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TALENT MANAGEMENT

Disability as a Source of Competitive Advantage

Employing people with disabilities can significantly improve an organization.

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TALENT MANAGEMENT

IDEA IN BRIEF

THE PROBLEM

Many companies realize the value of diversity, equity, and inclusion. But most focus on gender and ethnicity, paying less attention to people with disabilities.

WHY IT HAPPENS

Employing people with disabilities is usually seen as a social cause, one best suited to not-for-profit or public sector organizations. This is a missed opportunity.

THE SOLUTION

Innovative companies are demonstrating that the inclusion of people with disabilities can lead to real competitive advantage in four ways: by bringing unique skills to the company, by increasing collaboration and psychological safety, by adding to a firm's value proposition for customers, and by boosting a firm's reputation with talent and investors.

In recent years many companies have become sensitized to the value of diversity, equity, and inclusion. But in most organizations, DEI initiatives focus largely on gender and ethnicity. A group that has received less attention is people with disabilities, and that has led to disparities in the workplace.

> Distinctive skills frequently go hand in hand with disabilities. For instance, academics have found strong links between autism and aptitude at tasks requiring attention to detail.

In the United Kingdom, for example, the employment rate for people with some form of disability (who make up 20% of the working-age population) is just 53%, far less than the 81% rate for people without disabilities.

Employing people with disabilities is usually seen as a social cause—one best suited to organizations that are not-for-profit or in the public sector. That is a mistake—and more important, a missed opportunity. In many industries innovative companies are showing that the inclusion of people with disabilities can lead to real competitive advantage and long-term profitability.

Our research suggests that having employees with disabilities in its workforce can build a firm's competitive advantage in four ways: (1) Disabilities often confer unique talents that make people better at particular jobs; (2) the presence of employees with disabilities elevates the culture of the entire organization, making it more collaborative and boosting productivity; (3) a reputation for inclusiveness enhances a firm's value proposition with customers, who become more willing to build long-term relationships with the company; (4) being recognized as socially responsible gives a firm an edge in the competition for capital and talent.

Let's look at each of these advantages in turn.

Special Abilities

Distinctive or unusual skills frequently go hand in hand with disabilities. For instance, academics who study autism, notably Cambridge University's Simon Baron-Cohen, have found strong links between autism and aptitude at tasks requiring attention to detail. Managers at the international IT consultancy Auticon, which offers quality assurance and testing, report that their autistic consultants are often especially adept at recognizing patterns, which makes them better than others at seeing correlations and interdependencies in large amounts of data. Moreover, they can often stay focused for unusually long periods of time, even when doing work that is routine and repetitive.

Famously, the British intelligence service enlisted Alan Turing, who as one study concluded was most likely on the autism spectrum, to help crack the code produced by the German Enigma machine during the Second World War. A brilliant mathematician who was generally considered the founding father of computer science, Turing later would become one of the pioneers of artificial intelligence.

Recently major corporations like SAP, HP, and EY have been recruiting neurodiverse employees for specific tasks like quality control, cybersecurity, and code checking. And the British intelligence service still hires them too: Its Government Communications Headquarters unit enlists relatively large numbers of people with dyslexia to analyze surveillance data, because they're unusually good at spotting anomalies that others miss.

Dyslexia and autism aren't the only disabilities linked with special talents. Consider the Gran Estación shopping mall, in Bogotá, Colombia, which employs many people with physical disabilities in a variety of roles—for example, customer relations. People who want to meet with someone in customer service are often upset and angry. Disabled employees seem better able to defuse such emotions, according to the mall's general manager. One customer service rep who was in a wheelchair told us, "As soon as they see me come in, they calm down." Her disability has proved to be an advantage in her line of work.

In some jobs aspects of a person's disability may actually be a good fit with the tasks at hand. At Gran Estación the team working in elevator shafts, which often can be very noisy, consists largely of deaf people. The mall outsources security to a company called Seguridad Burns de Colombia (now part of the multinational Securitas), which hires disabled people to work as security officers. A common problem at the mall is pickpocketing, particularly when it's crowded. As the managers at Gran Estación explained to us, guards in wheelchairs are significantly better at spotting these crimes because they have better visibility at pocket height. What's more, when they need to rush to a scene or chase a perpetrator, they can move faster than people on foot, and many have superior upper body strength, which helps them restrain thieves. Since 2007, Securitas has been introducing the concept of wheelchair security guards at many customers across Latin America.

Examples abound of companies around the globe seeking out people with disabilities for specific tasks. In Spain, for

Seeing coworkers with disabilities succeed can inspire other employees to realize that they, too, can elevate their performance.

instance, the design studio La Casa de Carlota puts people with intellectual disabilities, such as Down syndrome, and with autism on all its project teams because, as its creative director says, "these guys create details that are completely authentic and original." The private health insurance company DKV employs only people with disabilities in its DKV Integralia call center because it found that satisfaction was much higher among customers helped by employees with disabilities—even though the callers didn't know they were talking with disabled people. The center's general manager says these employees "show exceptional levels of empathy and try to solve the problem as if they were helping someone from their own family." The point is not that a disability is always an advantage but that with various types of jobs—probably more than most employers realize—certain types of disability may suit the work requirements.

Organizational Culture

In many companies we studied, employees consistently told us that working with disabled people fostered a more collaborative culture. Not only is such a culture a recognized source of competitive advantage, but it's also difficult for rivals to imitate, which is why many businesses invest considerable resources and effort in trying to build one.

The challenge in nurturing a sense of community is overcoming people's tendency to compete for status and recognition. Employing people with disabilities, however, can mitigate it. Because they may need active support and assistance with certain things, working with them can inspire their colleagues to develop more-cooperative habits and attitudes. Employees at the La Trappe brewery in the Netherlands, which hires people with disabilities for its production and hospitality teams, explained to us that having disabled colleagues made them realize the importance of helping one another out and being aware of one another's needs and abilities. In addition, it let them see that it's acceptable and even desirable to *ask* for help themselves. "It gives us something special in the workplace," the former chief executive of the brewery, Thijs Thijssen, told us.

To investigate whether employers of people with disabilities in general saw a positive effect on their cultures, we worked with AESE, the Spanish Association of Supported Employment, which helps people with disabilities find and maintain jobs. Through it, we surveyed HR executives at 57 companies that had hired one or more people with disabilities about their experiences with those workers and about the effect they had on the organization as a whole. No fewer than 88% of the HR professionals agreed that the internal culture of their firms had improved significantly since they had hired employees with disabilities (with 70% in strong agreement).

We then decided to dig a bit deeper into what that positive cultural change involved. We provided the HR executives with a definition of psychological safety, a concept developed by Harvard Business School professor Amy Edmondson: the belief that within a team, people can ask for help and share ideas, concerns, or feelings without risk of suffering adverse consequences, like being punished or humiliated.

When we asked the HR professionals about changes in psychological safety at their firms, 65% indicated that it had increased since the hiring of employees with disabilities. What's more, 74% observed that their teams had begun to work better together, and 75% indicated that the hires had enhanced the general atmosphere in their organization. One respondent commented that having a disabled colleague on a team "immediately improves team cohesion and creates new routines for collaboration." Another said, "Ever since a person with an intellectual disability started working in the company, all of us have behaved in a more humane way."

Our case studies also suggest that colleagues of people with disabilities don't learn just to be more accepting of one another's limitations. Seeing coworkers with disabilities succeed can inspire other employees and make them realize that they, too, can elevate their performance. The HR director of Gran Estación observes, "The person who is next to the person with a disability gets motivated because he realizes that if someone with difficulties has such good performance, then someone who hasn't got them also should be able to deliver it."

All of this results in high levels of employee engagement. Thijssen told us that La Trappe's employee attrition rate and absenteeism had fallen to all-time lows. People didn't want

> We know from research that customers value not just the content of a product and its functionality but also how it is produced and by whom.

to leave the company and hardly ever called in sick. Other companies in our study had similar experiences: Twenty of the 57 firms that we surveyed reported a decline in absenteeism after their companies had started hiring people with disabilities.

Market Appeal

The employment of disabled people can be a significant part of a company's value proposition to customers. Consider the large, successful Dutch coffee chain Brownies&downies (B&D). It offers high-quality hot beverages and sandwiches at competitive prices in prime locations, just like its rivals Bagels & Beans and Starbucks. Yet there is one difference: Many of B&D's employees have Down syndrome.

That difference defines the company's marketing strategy. B&D avoids high-traffic locations, like train stations and business districts, where many customers just want a quick coffee. Instead it focuses on places where people can sit down quietly and relax. Having people with disabilities prepare and serve the products may at times make the service a little slower, but it is one of the reasons some customers like to visit the chain. Indeed, we know from research that customers value not just the content of a product and its functionality but also how it is produced and by whom.

To further explore how people with disabilities help firms strengthen their appeal, we set up a series of experiments, enlisting 200 individuals as participants. Half of them were asked to consider purchasing a customized mug online from a company that had received high ratings from its customers. The other half were asked the same thing but were also told that the company employed many people with disabilities. We then analyzed people's willingness to pay for the mug.

The fact that the company employed people with disabilities by itself didn't increase people's inclination to pay more for the mug. So we repeated the experiment with another group of 200 participants, who were asked to consider buying an engraved necklace. We found much the same result: The participants weren't willing to pay more (or less) for something that was produced by a company that employed disabled people. They also didn't rate the quality of the product any higher.

However, in both cases we also tested for general attitudes toward the company: Did people feel they liked the company? Did they perceive what in marketing is called a "communal relationship" with it, in the sense that they would like to see the company succeed, felt happy if it performed well, and were willing to actively support it? If the company employed people with disabilities, the answer was yes: Customers were significantly more likely to engage in a communal relationship with it than they were with a company in the control group.

Interestingly, our results clearly indicated that people's willingness to pay was significantly higher for a company that they liked and felt a communal relationship with. So even though customers are not willing to pay more for a product or a service just because the seller employs people with disabilities—there is not a simple direct relationship—they are willing to pay more for a product or service if they feel a psychological bond with a company. And that bond is much more likely to form if a firm is known to have disabled employees. Thus, there is a strong indirect positive effect on people's willingness to pay for a product or service. We also found some indication that customers would be more likely to make repeat purchases from the company.

In another follow-up experiment—this time analyzing 177 new respondents' inclination to buy and willingness to pay more for a backpack—we examined why people feel a stronger relationship with a company that employs people with disabilities. Analyzing different potential motives, we found that it's because they perceive such a company to be more fair (for example, in its pricing) and because they feel that they're being helpful themselves by purchasing its product or service. It made them feel good about themselves, which can be a powerful and persuasive addition to any firm's value proposition. So the general attitude of the public toward a company becomes more positive and supportive if it employs people with disabilities, which down the line significantly enhances the inclination to purchase from it, become a long-term customer, and pay more for its offering.

Q W E O R T Z O L D

ABOUT THE ART

HBR commissioned the team from La Casa de Carlota, Barcelona, to create the illustrations for this article. The group's work process begins with chaotic brainstorming among creatives with intellectual disabilities, design professionals, illustrators, and design school students. Little by little illustrations emerge that blend artfully with one another.

A related study by David Dwertmann of Rutgers University and several colleagues also points to positive connections. When they analyzed the attitudes of customers in a group of supermarkets in Lithuania who had been served by workers who were in wheelchairs or had a hearing impairment, they found that employing people with disabilities enhanced the reputation of the firm, making it viewed as more socially responsible.

These findings, however, do present some challenges for companies. If people value how something is produced and by whom, it implies that the company needs to show and communicate to customers about whom it employs. With a coffee chain, that's easy because the servers can be directly observed by customers. But with, for example, a factory, it will require a lot more thought.

Take the successful Spanish cooperative La Fageda, which runs a dairy farm and a gardening business and is well-known for its high-quality yogurt. It employs several hundred people who have intellectual disabilities or suffer from mental illness (many of whom might otherwise be in psychiatric hospitals), paying them standard salaries. By buying the cooperative's products and services, customers will help these people have productive and meaningful lives. However, supermarket consumers may not know about La Fageda's workers.

To address that problem, the cooperative opened a visitors' center, which, given its location in an area of natural beauty, attracts more than 40,000 visitors a year. "That is the best marketing we have," commented founder Cristóbal Colón. "People go away not just liking the yogurt but also—after seeing the forest, the cows listening to their music, and the workers doing their jobs—as apostles." People develop an emotional connection with the La Fageda brand.

Similarly, La Trappe, which is located on the grounds of a Trappist monastery, opened a tasting room on its premises that attracts more than 125,000 visitors a year. When they tour the brewery and taste its beer, they see the employees with disabilities at work. As La Trappe's marketing director explained to us, "They become real fans and tell all their friends and family about it."

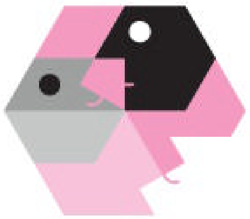
Employing people with disabilities isn't a substitute for good products or fine customer service, but it adds another dimension to a company's value proposition, which can help differentiate it in a crowded market. It's important, though, to be genuine about it rather than, for instance, recruit only a small number of employees with disabilities for PR purposes. If customers sense that the practice is not genuine and not really spread throughout the firm, it may not only be ineffective but even backfire: It could make them feel angry and manipulated and perceive the company as being exploitative rather than benevolent.

When hiring people with disabilities is implemented sincerely, however, it can generate another positive knock-on effect: attracting customers with disabilities and their family members, who form a considerable economic segment themselves. The managers of Gran Estación noticed that once they started hiring more people with disabilities, particularly in visible functions such as security and information services, the number of disabled customers began to increase substantially. We ourselves have observed many families with disabled children in the mall. According to Andrea Hernandez, its coordinator of human resources, this is because they feel more at home in Gran Estación, which also makes them more likely to be return customers.

Access to Capital and Talent

Hiring people with disabilities can give companies an advantage with key stakeholders besides customers. Take the market for capital: Investing that targets ventures focused on environmental, social, and governance (ESG) issues has increased rapidly in the past several years. Bloomberg

Hiring people with disabilities makes a firm more likely to be seen as an attractive employer for people *without* disabilities.



estimates that ESG-related assets topped $41 trillion in 2022 and will reach $50 trillion by 2025. According to CNBC, the assets of impact-investing index funds quadrupled from 2017 to 2020 and now compose 20% of the U.S. market. Employing people with disabilities makes a company more attractive to such investors.

In Europe venture capitalists have started taking ESG factors into account in their investment decisions, and a growing number of social impact funds are looking to put considerable sums into socially responsible start-ups. Employee diversity is an increasingly relevant consideration in those decisions. The European Venture Philanthropy Association, for example, reported in its “Investing for Impact Survey” that 36% of the investment focus of beneficiaries related to people with disabilities.

People with disabilities also are an untapped source of talent. They may not always be very skilled at the traditional process of finding and applying for jobs or at interviewing, but those skills may not correlate at all with the requirements of the jobs involved.

Prejudice often deters employers from hiring people with disabilities, but that means it’s easier for more-enlightened companies to snap up highly skilled people. In the United Kingdom, for example, high school graduates with disabilities are no more likely to have a job than people who left school before graduating—suggesting that there are many qualified disabled people available for employment. Auticon, for instance, has hired several with STEM PhDs for data science and analytics jobs who at the time were working as couriers and delivering pizza.

Moreover, hiring people with disabilities makes a company more likely to be seen as an attractive employer for people *without* disabilities. We saw this in an experiment we ran, which involved a simulated potential employer, a global firm with about 3,000 employees in financial services. We provided information on the company to 200 respondents (who were different from those in our previous experiments). With half of them, we mentioned that the firm had employees with a disability, but with the other half we did not.

The results revealed that if a considerable proportion of employees at the company had a disability, job seekers liked the company much more, were substantially more interested in working for it, and thought they would simply be happier there. They even indicated that they would be willing to forgo a higher salary from another firm to join the company. That corroborates prior findings that having a positive impact on society is increasingly critical in the labor market. Recent surveys—by Gallup and Deloitte, for instance—consistently indicate that, particularly for Millennials, whether a company behaves in a socially responsible manner is an important criterion in choosing an employer.

Like employees and investors, other stakeholders—such as advertisers, unions, and alliance partners—are likely to value the employment of people with disabilities. For instance, it helps the coffee chain B&D attract franchisees.

EMPLOYING PEOPLE WITH disabilities is a worthy cause. But portraying it as such masks the fact that it can deliver real benefits to organizations. When Andrea Girlanda, the CEO of Auticon, sent his customary note thanking one of the firm’s large clients (the head of data analytics at a multinational pharmaceutical company) for making a difference in the lives of disabled people, he received a swift but concise reply: “Stop thanking me; I am not doing this from the kindness of my heart. Your consultants are great; we are doing things so much better than before.” The creative director of La Casa de Carlota holds a similar view. “Lots of people think that we are being kind by working with people who have autism or Down syndrome, but I don’t feel I’m being kind; I feel I’m being clever!” the director says. “I’m tapping into their unique form of creativity, which hasn’t been used to its full potential in the creative industries up till now.” There is nothing wrong with wanting to do good in the world, but there is also nothing wrong with wanting to do well, and the latter is enough reason to employ people with disabilities.

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TECHNOLOGY
& ANALYTICS

What *Smart* Companies Know About *Integrating AI*

Talent and data are just as important as technology.

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ABOUT THE ART
Edoardo Tresoldi uses the form, framework, and transparency of wire mesh to illustrate a dialogue between architecture and the world.

Mercury Financial, founded in 2014, is a small fintech with a big mission: helping customers restore their credit profiles. Jim Peterson, Mercury's CEO and a finance veteran, knew from the outset that AI was crucial for creating the personalized customer journeys that would be at the heart of Mercury's offering. So in 2021 the company began searching for an AI-driven engine that could give every customer the right nudge at the right time through the right channel and in the right sequence. The nudge might be a push to split up payments among multiple credit cards, or a gentle warning that the customer was nearing a credit limit. Some might respond to a text message, others to an email. Some might respond best two weeks before an action date, others two days before. Any one of those elements—or, more precisely, the particular combination of them—could spell the difference between a fully engaged customer and a deeply annoyed one.

Mercury, a former BCG client, is not in the business of building technology, so its leaders decided to begin with open-source AI. Given that most such tools charge according to usage, the upfront fixed costs would be low. Mercury concentrated on how to integrate available AI solutions with its content-management, fraud, and eligibility systems, and many other front- and back-end systems. The company then automated its marketing processes, again drawing on available AI tools but using its own code for all the tests needed to learn what worked for whom and for tracking past results. The system it built focused on managing hundreds of variables for targeting purposes and creating content in a microgranular way. Within six months the pilot had generated a 10% improvement in actions taken as a result of the fintech's messages. Mercury knew it was on to something big.

AI is required to achieve precision and scale in personalization. It can gather, analyze, and use enormous volumes of individual customer data and tailor the customer journey at every touch point. Mercury's experience, and the experience of CVS and Starbucks (which we'll explore in detail), debunks the prevailing notion that extracting value from AI solutions is a complicated technology-building exercise. That thinking keeps companies from capturing the power of AI. They needn't build it; they just have to properly integrate it into a particular business context.

When you recognize the value of focusing your resources on integration and process change, it sharpens what you look for in an AI system. You begin to understand the importance of seeing your data and the design of your tech architecture as competitive assets. And you push the rest of your organization to drive more testing that can feed the intelligence of your AI system.

But AI is probably only about 10% of the secret sauce. The other 90% lies in the combination of data, experimentation, and talent that constantly activate and inform the intelligence behind the system. Personalization is the goal; it's what constitutes a company's strategic brawn. The technology is merely the tool for reaching it. In this article we'll present what it means to integrate AI tools and what it takes to continually experiment, constantly generate learning, and import fresh data to improve and refine customer journeys.

RETHINK HOW YOU ACQUIRE TECHNOLOGY

In more conversations than we can count, we find ourselves disabusing executives of their notions about what creates an AI advantage. A company needn't aspire to be another AWS, Microsoft, Google, or Adobe—all builders of core AI tools that are, after all, in the business of selling them. Familiar masters of AI, such as Uber, Netflix, and Spotify, may research and design new solutions, but generally they do so to extend applications that accommodate their uniquely huge scale or

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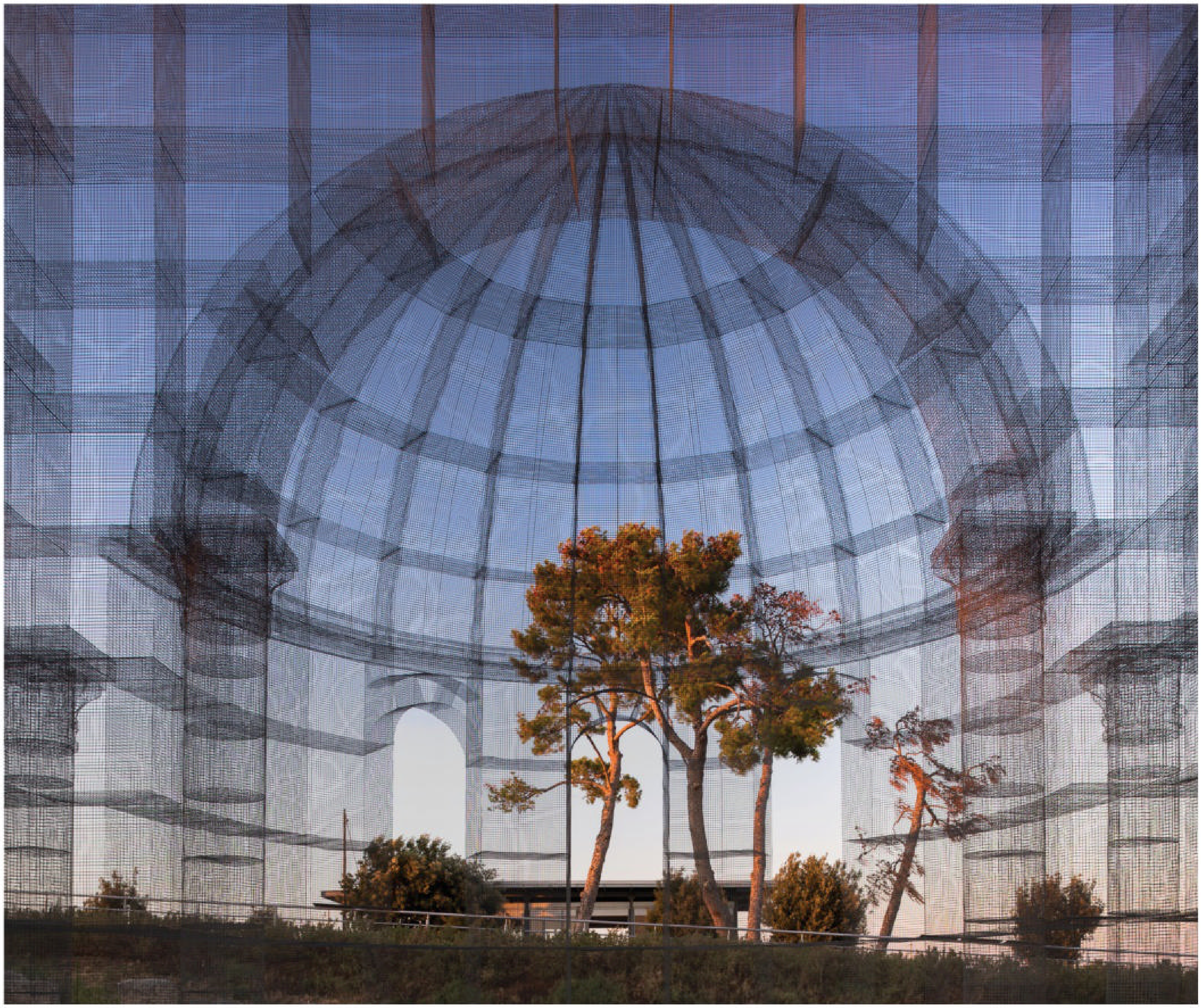

IDEA IN BRIEF

THE OPPORTUNITY

AI has the power to gather, analyze, and use enormous volumes of individual customer data to tailor the customer journey at every touch point.

THE CHALLENGE

Many companies avoid AI projects entirely because they believe that extracting value from AI solutions requires developing complicated technology first.

THE SOLUTION

Companies can use open-source AI tools and data from third-party providers while continually experimenting, learning, importing fresh data, and refining customer journeys.

An abundance of customer insights is of little use if your systems can't convert every one into tailored actions for individual customers.

to perform specific functions not otherwise available (such as movie-frame analysis in the case of Netflix's recommendation algorithm). But few companies outside the tech world are monetizing their own digital innovation. For them, innovation involves offering a fresh solution atop a base of digital capabilities. Competitors all have access to the same AI, yet business outcomes vary profoundly. One critical difference is the data a company feeds it. Competitive advantage hinges on unrelenting data collection, curated transformation or enrichment, and feeding the AI libraries that inform next-best-action capabilities. The marketer's job is to creatively apply those AI-driven recommendations to marketing campaigns and iteratively learn from them.

A wealth of open-source technology exists today, including most AI tools—broad ones, such as GPT-4 from OpenAI, and full-fledged libraries (applications written in open-source languages that are packaged for a specific use, such as XGBoost, for training a specific type of machine-learning model). Big tech makes many of its libraries or task-specific tools available—Meta (a BCG client), for instance, with its Prophet library for forecasting, and Airbnb with Airflow, a workflow management platform for data engineering pipelines. AI capabilities are embedded in many common customer-experience tools, such as the "experience clouds" of Salesforce and Adobe (both companies are BCG partners). Those are constantly improving too: Thanks to application programming interfaces (APIs) and the architecture of modern tech systems, it has become easier to get systems to talk to one another, as we'll explore later.

Another bit of debunking involves how to begin. Contrary to general thinking, a big-bang approach is not necessary. As with true agile approaches, it is smart to start out narrow, focusing on specific use cases—customer onboarding or early engagement, for example—rather than trying to redesign the entire customer experience from scratch. It is smart to choose an area in which you can get real traction with AI and then gradually expand its use.

None of this is meant to suggest that implementing an AI-based customer journey is easy. And three common shortcomings can make it especially challenging, even when you have the right AI solution.

Limitations on data capture. These can occur when a preponderance of the data is unstructured, as in health care, or unrecorded, as in the hospitality industry. No one inputs feedback from the cards left for guests in hotel rooms, which may contain immediately valuable and addressable information. If a hotel recorded your preferences regarding bed type, cleaning schedule, food allergies, facilities at each property that you've used, and so forth, your next stay could easily be tailored to your taste.

Lack of connectivity between the AI solution and marketing. A supermarket chain might assume which customers prefer non-meat foods or which ones are bargain hunters, without explicit confirmation. AI provides access to such personalized predictions automatically, at scale. But to test the assumption, you need a martech system into which you can channel that data in the form of a dialogue. The insight itself can't create value unless it's activated.

Inability of the system to automatically scale. An abundance of customer insights is of little use if your systems can't convert every one into tailored actions for individual customers. And you can't rely on manual input or analysis to develop a perfect one-off personalized campaign. Without a robust, scalable system, insights will be suppressed or used too narrowly within just one function.

THE FOUR KEYS TO SMART INTEGRATION

In our experience guiding a variety of companies as they developed AI-based customer journeys, we've pinpointed four defining characteristics of a smart integrator: *clarity and alignment of goals, sound data instrumentation, a loosely connected tech architecture,* and *an experimental culture.* Notably, none of them includes having a better AI algorithm, though they do call for a better-trained one.

1

Clarity and alignment of goals. AI-based marketing requires clear optimization objectives for every use case, and those goals need to be reasonably narrow. Broad general objectives, such as "accelerate sales growth," make it impossible to know how to attribute results. A more appropriate objective for AI might be "minimize wait time," "lower the incentive cost per sale," or "make a suggestion the customer will accept." If there are multiple actions the customer might take, you'll need to decide in advance:

Do we want the AI to optimize for the most valuable of the options or for the ones the customer is most likely to take?

AI applications make predictions primarily on the basis of historical data. If AI focuses too broadly, it loses the power to optimize; if it faces a situation for which there's no precedent, its predictions will be inaccurate. Rather than one AI engine to govern everything, you may need multiple AI engines to build a broader customer experience. One leading health care company, for example, has an engine to identify health plan members most at risk for an acute incident; another to recommend how to approach a member; another to suggest a test design for experimentation; and still another to optimize the whole portfolio of outreach types within a specific budget.

One reason Starbucks has been successful in AI-based personalization is its goal clarity. In driving a sale from a marketing outreach, the company takes into account the fact that many of its product teams want their offerings promoted, so it has decided to optimize for the touch most likely to compel a customer to buy. (Along with actual response data, Starbucks captures implicit interest—for example, what the customer browses and whether she hovers over an image, clicks on a description, or returns to the same page three times in a week.) Beyond its constant experimentation, the company focuses on how marketing can boost total net incremental revenue rather than on optimizing a specific beverage's profit and loss. That allows for a holistic definition of success.

2 **Sound data instrumentation.** The mechanisms that record, organize, and share data on customer interactions, the company's associated actions, and outcomes across touch points are the nuts and bolts of a company's AI personalization program. This data instrumentation includes everything from call center logs and data sourced from second- and third-party relationships (such as channel partners, media companies, and

data brokers) to automation software that generates and tracks digital communications (such as that from Salesforce, HubSpot, and Illumin).

A company needs "receptors" to capture information about a customer's every interaction across every channel, and that information must be remarkably granular. For example, in a call center interaction, the company would want to know more than the purpose of the call: Did the caller sound annoyed or confused? Was the caller's computer open during the encounter? Was the caller following the rep's instructions or being distracted by something else?

When a company sends a test email, it must be able to monitor the phrasing, the image that is embedded, the font size and colors used, and any other variable that could possibly affect the customer's response. A tagging architecture—for capturing and classifying the metadata of these interactions and communications—allows for testing and learning.

When one of us (David) served as chief marketing officer at Aetna (now part of CVS Health), the primary goal was to get people to take health-promoting actions such as getting a flu shot and taking their medications regularly. The company knew who it wanted to take which actions, but it didn't know how to get those individuals to comply. An enormous amount of experimentation was required: changing the message (both the offer and its creative content), testing an incentive, altering the time of day sent and the sequence of messages, and so forth—none of which would have been feasible without mechanisms in place to set up tests and track the microvariables that drove responses. Aetna had to make sure that every interaction was comprehensively tagged with descriptors of what was in it (color of the text, nature of the image, tone of the language, specific words) and that every point of interaction was captured in minute detail: when the customer interacted, how many clicks there were, whether the customer left and returned, where the journey went after the first click. This required embedding the code in all the places of interaction—web, app, email, SMS, and so forth—and integrating the data flows that came back from them. That was where the company focused its time—not on building new AI. As AI systems do an increasingly better job of writing code to facilitate data integration and automatically tagging marketing assets, the work becomes easier.

Data from third-party sources, such as weather, power outages, demographic and psychographic data, and general

When a company sends a test email, it must be able to monitor any variable that could possibly affect the customer's response.

health data about a zip code population, provides further context. The broader and more granular the information, the richer the models can be. That richness fuels your performance edge. Do customers respond right away or take days? Do they scroll down for further information and then click, or jump off immediately? Which incentives do they respond to most promptly? Data instrumentation enables the continual testing and experimentation that provide answers, help the system keep learning, and inform the company's understanding of what's needed to get customer A to respond versus what customers B, C, and D require.

3 **A loosely connected tech architecture.** The customer-experience technology stack consists of a prediction engine, a sequencing (or experience management) engine, a content engine, channel delivery engines, and an experimentation and analysis engine. In addition, the AI draws from five or more systems to stitch together a customer journey: marketing, customer service, product usage, billing, online channels, and sometimes a retail store. Given the likelihood that new capabilities will be added and that several AI engines may need to be plugged in, it is best to design the stack in a modular way.

AI provides the intelligence and the computational speed and scale to fuel operations that are increasingly driven by automation. Thus the technologies that carry out the automation must be able to accept the AI's signals and feed information back into it to help it improve. A loosely connected tech architecture, in which systems work with but are not dependent on one another, is ideal.

Publicly available application programming interfaces—which give developers access to proprietary software through a simple, versatile standard of communication—enable this modular architecture. APIs are the lingua franca of digital dialogue across disparate platforms. A simple example is an API that links a company's CRM system to a cloud-based phone system, allowing a call center agent to immediately phone a newly generated lead without having to exit the CRM software. With open APIs, information can be moved seamlessly, models updated easily, and new capabilities added in a modular way. A loosely connected architecture allows companies to mount faster competitive maneuvers, because they can easily swap out components the moment new capabilities become available, with minimal switching costs.

To see how a loosely connected architecture enables the integration of the various elements of the stack and supports personalization at scale—the whole point of smart integration—consider Comcast. The company realized it would be impossible to formally connect all its customer data systems. But the systems had to be linked somehow if AI decisions were to drive what to send to whom through which channel and feedback data were to be returned to the AI.

Pointillist, Comcast's AI decision tool, does double duty. First it matches a customer's data from across all the company's systems—its app interactions, the call center, product use logs, and so forth—and creates an integrated view of the customer. Then, operating like middleware, it knits together multiple databases into one integrated database, precluding the need to create yet another, formal database. Pointillist finds all relevant information about a customer and time stamps it to inform the company's view of the customer's journey. In real time the system finds the matches, builds journey maps, identifies anomalies that need attention, and drills down into root causes. Using the standards in Genesys, Comcast's central customer system (and a client of David's), Pointillist channels the information about the customer into all customer-facing interaction systems, which are compatible with Genesys's API.

Customer interactions are tracked in chronological, time-stamped order. The system will alert Comcast in real time that Jane Doe is on the mobile app and having difficulty accessing service plan information. Even before she calls Comcast, it can send her a text message suggesting a quick fix. If she doesn't act, or if that action doesn't resolve the problem, the software indicates that she will probably call—so if she does, the call center system already knows what her problem is. It can determine whether a particular automated response could help her, in which case it provides automated prompts, or whether she needs to speak with a human—which, as the costlier solution, is always the last resort. The beauty of this system is its real-time responsiveness and the speed and frictionless experience it provides.

Over time, as Pointillist continues to gather information, it allows Comcast to constantly test new and more effective ways of handling any given problem: to determine the ideal message, to find the best way to intercept the customer, and even to track whether customers who experience problems actually contact the company or not. In its first 18 months this AI-driven system saved Comcast more than 10% in call center costs. The feedback the company gets and the improvements it has made to the online customer experience create fewer reasons to call. The system has helped Comcast's Xfinity Mobile achieve top ranking by J.D. Power for several consecutive years.

4

An experimental culture. AI stokes creativity by allowing a company to test ideas rapidly and to do more at scale. Furthermore, it learns from the past, across millions of data points, unlocking innovation quicker than a human could. But AI does not invent; it just predicts, on the basis of past patterns. Marketers invent, and the AI learns what works, for whom, when, and how. Invention requires a culture that values experimentation and risk-taking.

All else being equal, a company's experimental data is the source of its competitive advantage. Leaders must recognize that a test-and-learn mentality is essential for translating that data from raw material into currency. That means accepting that experimentation has opportunity costs and that by definition, some experiments won't work. But even failed experiments offer worthwhile lessons.

Agile teams are essential in this effort. They have the prowess and the creativity to pursue new ideas and keep improving on them over time. Using agile work methods means you plan for what you can but leave room to pivot quickly according to what the experiments reveal. Leaders therefore need to examine their incentives and operating plans to ensure that they promote agile practices, allowing for tests that don't yield successful results and enabling the flexibility to change course. But leaders must also espouse an experimental mindset and have the financial license to take risks. Experimentation requires control groups to validate test results. You must be able to cut your losses and double down on winners. You need to finance operational changes and new incentives that have to be tested. The tighter the financial leash, the tougher it is to innovate. You cannot experiment if you can't take risks.

Starbucks's dominance in incentive-based marketing depends largely on its strategy of ongoing experimentation and its commitment to supporting it with the necessary resources. The company relies not only on digitally collected data and digital tech but also on its retail experience. Its tech is 100% composed of open-source tools and languages. Starbucks focuses on constantly enriching its data set and connecting it to its technology architecture, not on developing the algorithms.

Every week Starbucks runs randomized trials on a subset of its customers to test and learn and to reinforce or challenge marketing hypotheses. Customers who typically visit retail stores are incentivized to interact via the Starbucks app and leave a digital breadcrumb behind. The app gathers rich data: when, what, and where customers ordered; whether they placed their regular order or added an item; and details from the stimulus message (wording, incentives, when it was sent, when it was opened). All those details are harnessed by the app to tailor marketing outreach at the individual level.

The company can experiment with existing products as well as with new ones. For instance, it might choose to improve the messaging or the formatting—changes that can be as granular as the language, color, or image embedded in the message. It might want to test pricing or product recommendations on customer segments or on the most-effective channels. The more parameters, the more test permutations. Testing can take time, which is yet another reason to make experimentation a continual effort.

Its AI-integration journey brought Starbucks a 45% increase in net incremental revenue (sales attributable to marketing, excluding discounts) within four months of running a simplified proof of concept. At the 12-month mark, after randomized trials, a steady stream of fresh data, further testing, and expanding the program to the full customer base, Starbucks saw a 150% increase. As more channels, more offer combinations, and more permutations were added, that number reached 300%.

SMART INTEGRATION IN A COMPLEX CUSTOMER RELATIONSHIP

Unlike Starbucks, CVS Health operates in a regulated industry in which offering incentives to customers is prohibited. Just as important (if not more so), the variations across its

AI does not invent; it just predicts, on the basis of past patterns. Marketers invent, and the AI learns what works, for whom, when, and how.

patient-customer base and their health situations, and in the behaviors and actions the company wants to elicit, are considerably more complicated than those of a retailer like Starbucks.

CVS's journey began within Aetna, which it acquired in 2018. Aetna wanted to motivate Medicare members to take more-healthful actions. Helping people get healthier would also reduce costs for all and enable the company to improve customer service.

Aetna thought it could encourage its customers to take dozens of health actions; however, the company understood that, for example, getting patients to refill their prescriptions requires a different path for each one, and even a different one over time for the same patient. The data that could predict the best way to influence behavior at a given moment might come from recent claims, responses to marketing campaigns, customers' use of digital tools, basic demographics and regional variations, and clinical protocols, among other sources. In order to tailor its communications, the company has invested in the ability to change every aspect of an outreach (channel, timing, frequency, message, language), thereby creating millions of potential permutations. Testing them means customizing common martech tools to be flexible enough to capture and use this expanding range of data. But to optimize across all the potential variants, commonly available AI tools needed more historical data than was available at the time. So Aetna developed an approach to test all those permutations on a gigantic scale, with controlled experiments.

What might a controlled experiment look like? One example would be testing the relative impact of a text message, an email, and an interaction at the pharmacy counter while also varying the message, the timing, and the incentive. Because the number of permutations adds up quickly, the company would use an AI tool to examine the range of test options and determine the minimum number of controlled tests sufficient to track the relative impact of each permutation.

Instead of creating a novel algorithm, Aetna chose to use open-source algorithms and assembled a team to conduct ongoing exploration. Business specialists sit alongside data scientists and engineers to feed the system novel ideas and variants—such as new ideas for copy or images, new incentives, or new ways to reach out to a customer—and then analyze the results and course-correct. Aetna also hired behavioral economists to help develop the contact strategies for various situational profiles: some emphasizing risk of loss, others emphasizing the importance of a more-healthful lifestyle; some reminding a customer of family, others reinforcing a health message using local community data.

Ultimately, this approach has created a combination of human beings and individual technical systems uniquely tailored to power CVS's business model. Downstream, this intelligence engine fuels an array of channel-specific systems where interactions are executed: email, CRM, call-center scripting, text messaging, app notifications, and even pop-ups on pharmacists' computer screens. Those execution systems funnel the results of the interactions back into the AI's algorithms to keep feeding their learning. Over time some of the data becomes more complex: For example, a call center discussion might be dissected using natural language processing to understand the caller's disposition, choice of words, comprehension, and so on. By focusing on data flows, the potential for innovation, experimentation, and architecture, CVS has turbocharged open AI tools, generating substantial incremental annual profit margin from lower medical costs, better service ratings, improved health outcomes, and new cross-selling opportunities.

TO DRIVE COMPETITIVE advantage with AI, you need to integrate your internal systems with external ones—first to collect accurate customer data and then to present the resulting insights as personalized offers. Both processes must be carried out with relentlessly expanding scale and scope, continually adding new variables and increasingly granular detail. For the executive who must begin thinking like a smart integrator, this approach calls for a new leadership model with new priorities to take advantage of the infinite possibilities. Getting integration right increasingly drives a superior customer experience, and it will be the decisive factor in how brand equity is built.

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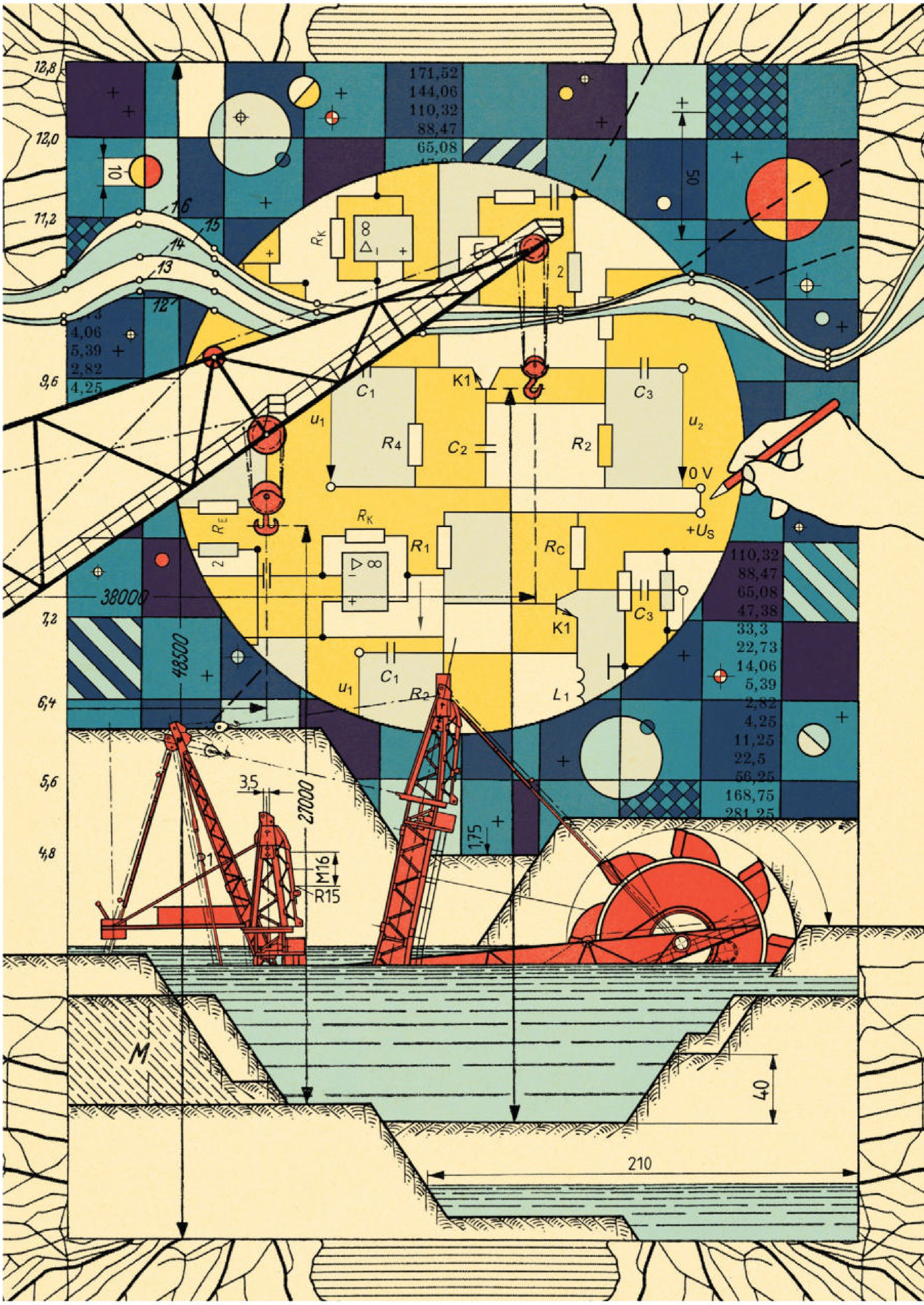
CLIMATE CHANGE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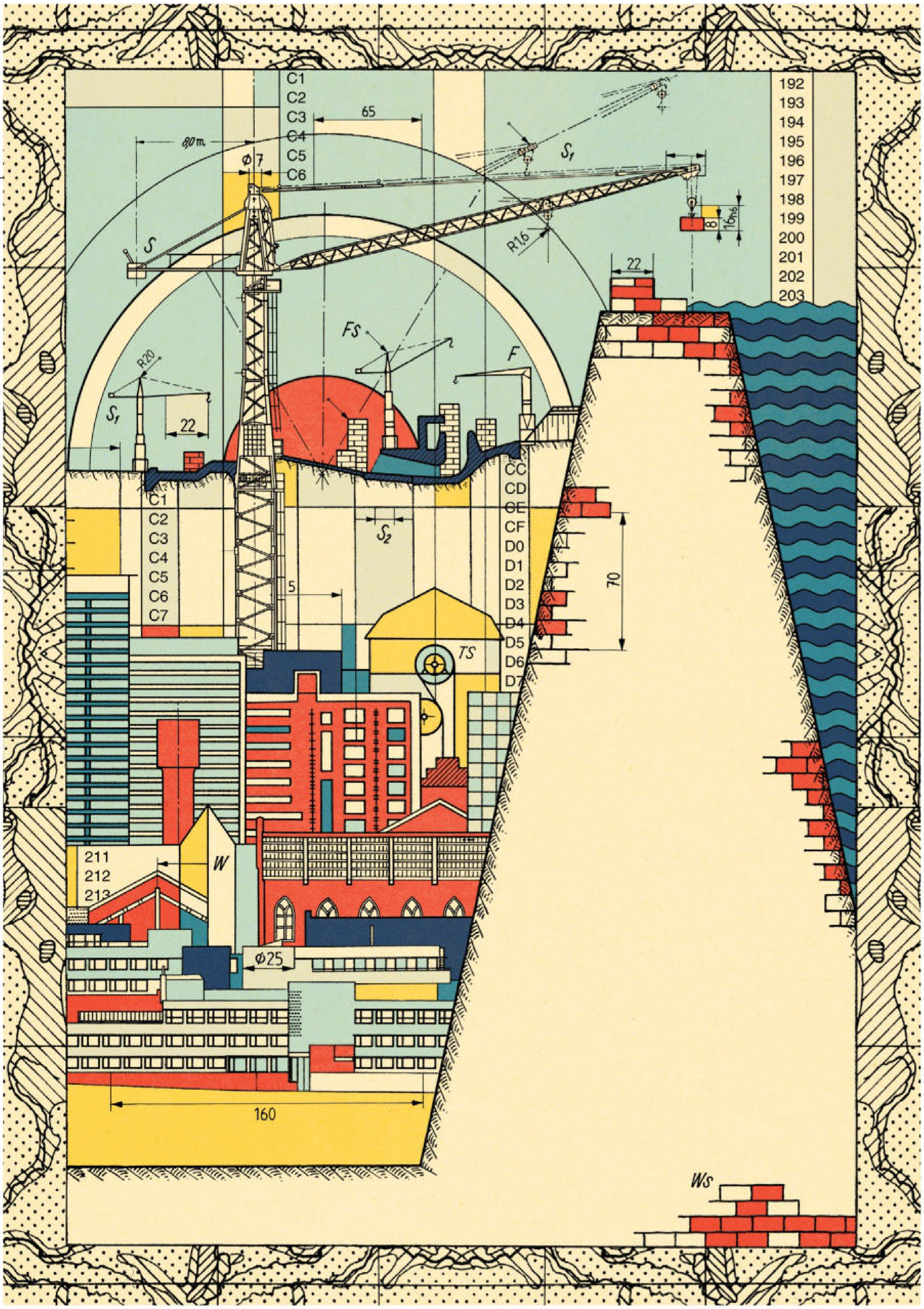
Accounting for Carbon Offsets

Robust reporting principles to improve today's carbon-trading markets

ILLUSTRATOR **CHRISTIAN GRALINGEN**

CLIMATE CHANGE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IDEA IN BRIEF

THE PROBLEM

Markets for carbon trading function poorly, and many traded offsets do not actually perform as promised.

WHY IT HAPPENS

Without robust protocols for monitoring offsets and in the absence of proper accounting mechanisms, market-based approaches to reducing atmospheric GHG will be vulnerable to misrepresentation and fraud.

THE SOLUTION

This article presents an accurate and auditable accounting framework based on five accounting principles. The first two define what can and cannot be counted as an offset and what may or may not be traded. The remaining principles set out basic accounting guidelines for offsets.

Recent media investigations suggest that the great majority of products transacted on offset markets remove very little GHG from the atmosphere.

Three sources account for the great majority of human-created greenhouse gas (GHG) emissions:

burning fossil fuels for energy, industrial chemical processes unrelated to energy production, and agriculture. Even with advances in “clean” energy technologies, the world remains heavily dependent on fossil fuels, and we do not have a realistic path to sustaining society without using current agricultural or industrial chemical processes, which together account for over 25% of GHG emissions today. Any plausible strategy for addressing climate change must, therefore, include *removing* GHG emissions from the atmosphere.

Natural processes, such as photosynthesis, and technologies, such as mineralization, can capture existing atmospheric GHG. Corporations, nonprofits, and government entities with net-zero emissions targets, and with limited options for removing GHG themselves, need to contract with organizations that have more-efficient carbon-sequestration processes and technologies to purchase quantities of extracted GHG from them. Such products are known as “carbon offsets.”

In theory, competitive markets for the purchase and sale of carbon offsets should help to finance entities that have a comparative advantage in capturing the most GHG at the least cost. Unfortunately, carbon-offset markets are, to date, nowhere near as effective as traditional commodity and financial markets. Indeed, recent media investigations have suggested that the great majority of products transacted on offset markets remove very little GHG from the atmosphere. Part of the problem is that the measurement of GHG extraction is challenging. How, for instance, can you accurately measure the quantity of carbon captured over the productive lifetime of a forest? Is a kilogram of carbon captured in trees equivalent to a kilogram of carbon stored in rocks or soil? And will the carbon being captured in trees or underground be sequestered for the same duration as current CO_2 emissions will linger in the atmosphere?

Beyond measurement issues, weaknesses in the accountability infrastructure of offset markets contribute to moral hazard problems. Without robust protocols for monitoring the status of offsets, sellers of carbon offsets pay less attention than they should to ensuring that the carbon stays sequestered over the lifetime of their implied obligations. Meanwhile, buyers of carbon offsets are tempted to relax the direct management of their own GHG emissions, believing that their purchased offsets have relieved them of their responsibilities. Unless offset contracts are properly accounted for and audited, market-based approaches to reducing GHG will be vulnerable to misrepresentation and fraud.

In this article, we sketch out an accurate and auditable accounting framework for atmospheric carbon removal. The principles presented here extend the E- (or environmental) liability method of carbon accounting, described in the 2021 HBR article “Accounting for Climate Change,” which enables organizations to measure and manage the cradle-to-gate GHG emissions incurred in their outputs.

Our principles extend that system by specifying how accurately measured and verified carbon offsets can be recognized as E-assets on organizations’ environmental balance sheets; when such E-assets can be used to extinguish E-liabilities; and when they must be modified to reflect offset impairments (that is, reductions in the quantity of carbon sequestered previously recorded on an E-balance sheet). With sound accounting principles in place, robust market practices and institutions for carbon-offset trading can develop, as they have for other products. And with well-functioning markets, the invisible hand of competition can accelerate innovation and deployment of improved offsetting technologies, leading to atmospheric decarbonization.

Let’s begin by reviewing the main issues with the current arrangements for offset trading.

Carbon-Trading Markets Today

At present, most offsets are purchased by firms to reduce their reported net emissions and to demonstrate that they are on a trajectory to net-zero status. Companies also use offsets to introduce additional supply in government-run cap-and-trade systems by claiming that the captured carbon in the offset creates a right to emit beyond the regulated cap. In most cases, the offset takes the form of a certificate, issued by one of several private registries, that points to sequestered carbon at specified projects.

A typical offset project—say, the planting of a forest—develops as follows. A project-management entity acquires land on which to sequester carbon and establishes a forest development plan that may involve various service providers to plant, support, and maintain the development; estimate tree-growth expectations; identify methods to measure the carbon captured over time; and so on. The project manager then negotiates with the various certification agencies (or registries) to reach an agreement about the offset tonnage the project will create. The "winning" agency issues certificates that point to the identified tonnage of the project. The project manager assures the certification agency that the project conforms to the agency's rules and will not be registered with another agency. The penalties to the project manager for any misrepresentation, however, are unclear.

Intermediaries for the project manager then sell the certificates issued by the registry to organizations seeking to offset their emissions, passing the received payments to the project manager, ostensibly to fund operations. The registry acts like a transfer agent in securities markets, keeping records of certificate ownership. But the certificate does not convey ownership of any captured carbon; rather, it represents the holder's entitlement to account for, as its own, some of the carbon (to be) captured, as underwritten by the registry. The certificate sale agreement typically excludes any substantive penalties for the registry over misrepresentation or wrongdoing. The certificate buyer has no direct legal relationship with the offset project, which means it cannot monitor any actual carbon capture and sequestration.

In many cases, carbon certificate buyers "retire" the certificates shortly after purchase by returning them to the registry with instructions to remove them from the marketplace, not to be resold. The buyers then claim to have permanently removed the carbon quantity printed on the certificates from the atmosphere, at least for the purposes of their net-zero calculation and disclosure.

Subterranean Mineralization: The Long-Term Solution?

The carbon captured by nature-based offsets (NBOs) is eventually rereleased into the atmosphere when biomaterials decay. Moreover, many NBOs, such as virgin forestation products, incur additional risks, such as land-use competition, forest fires, and the release of soil carbon into the atmosphere. Thus, although the vast majority of removal offsets traded today are NBOs, they are an imperfect offset product for long-run climate change management.

An emerging alternative is direct carbon capture followed by permanent sequestration in geological formations. This involves capturing carbon from the atmosphere or an emitting plant, such as a cement factory, and then sequestering it underground (for example, in a disused natural-gas field). Under high pressure, the sequestered gas reacts with other subterranean chemicals and water to mineralize, turning to rock. The time required varies with geological conditions, but it may be as little as two years. Once mineralized, the underground carbon is considered sequestered for thousands of years. This approach has many advantages but one large disadvantage: It is currently far more expensive—more than $100 per CO_2 ton—than nature-based-offset options, which cost approximately $10 a ton.

Obviously, this practice ignores even the most basic risks associated with carbon-removal projects (such as newly planted forests) that have long horizons to actual delivery of captured carbon and a material likelihood of impairment along the way (for example, from fire or disease). Registries attempt to mitigate such concerns in two ways.

First, they require that offset project managers confirm that they have the capacity to replace or refund the value of offsets should things go wrong. That mitigation device, however, has limited value. Certificate buyers have already retired their certificates and taken credit for the captured carbon immediately after purchase; they have neither an incentive to demand the replacement of any carbon lost through impairment nor a legal claim related to a retired certificate. Consequently, project managers have no incentive to maintain any capital to cover risk of impairment to the project or failure to capture carbon. Moreover, depending on a project manager's revenue-recognition methods, buyers' claims regarding their certificates could arrive long after revenues (and profits) from selling them have been distributed

> A functioning marketplace depends on clear definitions and measures of what is being traded.

to investors in the project. Finally, the complex, often cross-border processes necessary to mediate any claims would be infeasible for many registries, most of which are low-resourced nonprofits.

A registry's second protection method is to hold back some quantity of certificates that could have been sold but that now, like an insurance company's reserves, remain available to substitute for unrealized or impaired projects. Unlike an insurance company, however, the registry lacks transparency into its operations, independent evaluation of claims-paying ability, regulatory oversight, and the ability to raise additional capital.

A recent investigation of a large supplier of carbon offsets, published by *The Guardian,* found those deficiencies manifest in practice. The investigators concluded that "more than 90% of [the provider's] rainforest offset credits—among the most commonly used by companies—are likely to be 'phantom credits' and do not represent genuine carbon reductions."

Let's look at how we can fix this.

Five Principles of a Functioning Offset Marketplace

A functioning marketplace depends on clear definitions and measures of what is being traded. We propose five principles to underpin markets for the removal and storage of GHG emissions. The first two determine the scope of the markets by defining what can and cannot be counted as an offset and what may or may not be traded. The remaining principles set out basic accounting guidelines for offsets. The principles are grounded in the core bilateral agreement between an offset producer and a purchaser, because even if markets function through layers of intermediaries, they exist to connect offset producers with purchasers.

PRINCIPLE 1

Only offsets that remove carbon from the atmosphere may be used to reduce an organization's reported emissions. This principle follows directly from a frequently overlooked truth: The only emissions entering the atmosphere are direct emissions—those labeled by the Greenhouse Gas Protocol as Scope 1. The principle states that a valid offset to a given quantity of Scope 1 emissions must remove an equivalent quantity of GHG already in the atmosphere and sequester it for at least as long as the underlying emissions are expected to remain in the atmosphere. Such offsets are known as removal offsets.

This principle departs from current practice. The GHG Protocol, the dominant global standard for carbon accounting, does not at present substantively distinguish between actions taken to remove incurred GHGs (removal offsets) and actions taken to avoid emitting prospective GHGs (avoidance offsets). What's more, the protocol's lack of endorsement for the netting of removal offsets against emissions—using E-assets to remove E-liabilities from an environmental balance sheet—disincentivizes companies from spending money to sequester emissions themselves or to compensate other, more efficient entities to perform carbon-removal activities. As a result, markets today are most likely undersupplying legitimate carbon removals.

Principle 1 eliminates the accounting error of treating prospective emissions reductions as current offsets while encouraging companies either to invest more to green their operations or to purchase more removal offsets from efficient carbon removers. (See the sidebar "Why Emissions Avoidance Should Not Be Treated as an Offset.")

PRINCIPLE 2

A company may buy or sell removal offsets, but it may not similarly trade E-liabilities. Principle 2 allows firms to reduce their E-liability balances by purchasing valid removal offsets. It encourages firms to treat carbon removals like any other purchased good or service: Companies acquire them from those better able to provide them at lower cost. Enabling carbon-offset trading in well-functioning markets promotes these gainful exchanges and increases the supply of capital for the most-efficient offset producers.

Principle 2 also states that companies cannot separate their E-liabilities from the underlying product inventories to which they are attached. Doing so would be like keeping separate inventory books for costs and volumes, rendering them meaningless. In the E-accounting system, a company records the emissions it produces from its own operations as E-liabilities. It adds to those E-liabilities the emissions produced upstream by the suppliers of its purchased inputs. Outside of using legitimate removal offsets (Principle 1), it

Landowners wishing to book and sell legitimate carbon offsets as E-assets must demonstrate that their estimates are well-founded and that risks will be well managed.

reduces its E-liabilities only when its customers voluntarily assume them, on their own E-balance sheets, by buying the company's products. This process, which works like a value-added-tax system, leverages market forces in the supplier-customer exchange to drive emissions reduction. Allowing a company to trade away its E-liabilities (separate from the underlying inventories) would undermine supply-chain decarbonization by enabling entities to "park" their E-liabilities in shell entities domiciled in unregulated jurisdictions.

PRINCIPLE 3

Rights to carbon removals shall be recognized as an E-asset, and be tradable as a removal offset, when the timing and magnitude of the offsets are both reasonably estimable and probable. We now turn to principles for timing when an offset producer may recognize and trade captured carbon as an E-asset, and when such assets may be used to net out E-liabilities. We offer a hypothetical case to explain the principles.

Imagine that a landowner plants a new forest with the aim of selling the carbon that the forest will remove and sequester to a buyer seeking to offset its E-liabilities. We assume that the forest requires 10 years of growth before it begins to remove carbon in significant quantities. For the next 20 years, the forest absorbs carbon at a predictable rate. After 30 years, the fully grown trees capture no new carbon, but they continue to sequester previously captured carbon for 20 more years before decaying and releasing the carbon. The landowner, as the producer of the removals, owns the rights to the carbon capture.

Applying standard financial-accounting principles to the case of captured emissions, the landowner can capitalize such rights as an E-asset based on both the measurability of how much and when the carbon will be captured and the likelihood that it will be captured. In accounting parlance, these criteria are known as "reasonably estimable and probable," where "probable" means at least 50% likelihood but may also be defined (in regulations) as 90% or higher. Our landowner can estimate the tons of carbon capturable (the offset quantity) based on average annual growth of like tree species during years 11 through 30. Of course, disease, pests, wildfires, and illegal deforestation may reduce the quantity or duration of capture, and unexpectedly favorable weather conditions may increase the carbon captured per year and the duration of the forest's productive life. Landowners wishing to book and sell legitimate carbon offsets as E-assets must demonstrate that their estimates are well-founded and that risks will be well managed.

Even if an offset qualifies as an E-asset on measurability and likelihood grounds, we must guard against the risk that the sale of the offset fundamentally changes the magnitude and duration of the carbon capture. The separation of an asset (rights to carbon capture) from the originator creates an "alienability risk" when the asset is sold. Some rights to an asset, such as a patent, are alienable and may be sold by a parent entity since their properties do not change under new ownership. Other intangible assets, however, such as the synergies from a highly motivated and aligned workforce, are not alienable. A firm that attempted to separately identify and sell its HR synergies as a financial asset would most likely precipitate the intangible asset's impairment, lowering its value.

Alienability risk occurs in our forest example after the landowner has sold the forest's future carbon offsets. The landowner no longer has an incentive to maintain the forest's long-term capabilities for capturing and sequestering carbon. Principle 3's probable and estimable criteria thus can be met only when no reasonable expectation exists that the offset will be impaired as a consequence of its sale. This provision can be satisfied through standard performance contracts (which we'll discuss later).

PRINCIPLE 4

A company shall net a given quantity of E-assets against its E-liability account only when that quantity of GHG has been actually removed from the atmosphere and indefinitely sequestered. A company that purchases or produces an offset asset must determine when it can use that E-asset to reduce its E-liability balance. Principle 4 addresses this issue using the financial-accounting standard for revenue recognition. A company may recognize revenue from a sale only when it is both realizable and earned. A selling company "realizes" revenue when it receives cash, a cash-equivalent asset such as a marketable security, or a highly likely commitment to pay cash in the future. The company "earns" the revenue when it delivers its product

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Why Emissions Avoidance Should Not Be Treated as an Offset

Currently, some offset-trading markets monetize actions taken to avoid future emissions and sell them to third parties striving to meet net-zero targets. For example, a U.S. high-tech company can today buy an offset contract whereby the emissions-reduction action is paying a low-income resident of a developing nation to replace a charcoal-burning stove with one that uses a low-carbon energy source.

Unlike removal offsets, which are measured relative to an objective baseline of zero (a status quo under which no existing carbon would be captured), these avoidance offsets are measured against a theoretical counterfactual: the emissions that would have occurred had the avoidance action not been taken. Verification of these estimates is highly subjective. There is also the risk of double counting. The people switching to the low-carbon stoves and the company paying them to do so could both end up reporting the same reduction in emissions.

or service. For example, a theater that receives cash from ticket sales in advance of a performance (satisfying the realizable criterion) may recognize that cash receipt as revenue only after the performance has occurred (satisfying the earned criterion). In the context of netting E-assets against E-liabilities, it works like this:

The landowner in our example meets the realizable criterion at the time its E-asset recognition criteria have been satisfied (that is, the capture of carbon is both estimable and probable). That could be in year 0 for a high-quality landowner or somewhat later for a less reputable or less capable one. But regardless of when the realizable criterion is satisfied, the landowner does not start to "earn" the carbon offset until year 10, when it can verifiably demonstrate that nontrivial quantities of carbon are being captured by the forest.

If the forest manager sells the offset asset before the 10th year, the purchasing entity has to keep the E-asset unchanged on its books until year 10, when the earned criterion is met upon receipt of an audited report from the forest manager about the quantity of carbon that has been captured. Thereafter, the offset buyer may proportionately draw down its E-asset, up to the "earned" amount, to reduce (or "net") its E-liabilities. (In practice, this accounting transaction should happen via a contra-asset as described in the exhibit "Sample Flows of E-Assets and E-Liabilities.")

The higher standard of "earned" for eliminating E-liabilities (relative to "realizable" for recognizing E-assets) is based on the economic significance of netting. Just as revenue recognition increases a firm's income, raising shareholders' expectation for dividends, reducing a company's E-liabilities communicates to customers, shareholders, and regulators that the firm's products (its inputs and operations) generated less carbon than those of its peers did. New customer sales and new investments can be made based on such claimed efficiencies. Eliminating an E-liability, therefore, should meet a higher accounting threshold to be meaningful and less influenced by management's subjective judgments.

Principle 4 also states that GHG must be sequestered "indefinitely," which addresses a particularly challenging aspect of netting due to the duration of emissions liabilities. Estimates from NASA suggest that man-made carbon emissions persist in the atmosphere for at least 300 years (and possibly more than 1,000 years), an exceedingly long time horizon compared with that of virtually all other commercial contracts. In principle, the netting condition requires that the duration of an earned removal offset equal or exceed the duration of the E-liability. In practice, the term "indefinite" represents this principle. "Indefinite" does not mean "infinite"; it means that the sequestration has no definite end, based on technology, legal restrictions, or regulatory oversight.

This means that our forest offset project, which holds carbon for at most 40 years from first "earning" it, cannot on its own extinguish a centuries-long E-liability. Netting requires, therefore, an assurance that the offset owner has the financial capacity to repeat the process so that the carbon can remain sequestered over multiple forest-generation cycles, which could involve placing very long duration funds in an endowment- or pension-fund-type structure (more on this later). This problem is not shared by all approaches to creating carbon offsets. Carbon capture through subterranean mineralization, for example, can enable indefinite sequestration without multiple reinvestment cycles. (See the sidebar "Subterranean Mineralization: The Long-Term Solution?")

PRINCIPLE 5

An offset asset shall be impaired or accreted on the basis of new information about the quantity and duration of actual carbon sequestration. Our final principle directly addresses the risk that an offset asset's value may fluctuate over its lifetime. In the case of our forest, as noted above, impairment risks generally rise over time as increasing quantities of sequestered tree carbon become subject to fire, disease, pestilence, mismanagement, or other forms of catastrophic loss, in addition to the risk that the actual amount of carbon captured will fall short of expectations. Other long-lived assets are subject to such risks, and standard financial-accounting criteria exist for recognizing and measuring impairments. These criteria can also be applied to carbon assets.

Unlike typical tangible assets, some E-assets may become more valuable than originally expected, such as when the forest grows larger and faster than anticipated, enabling it to capture and store more carbon. Thus, Principle 5 also allows for accretions in value.

Under Principle 5, all offset contracts will need periodic audits to determine whether an impairment or an accretion has occurred and to attest to the magnitude of any change. The potential for impairments provides an incentive for companies to purchase from reliable offset producers—those that consistently deliver on the expected quantity and duration of sequestered carbon.

The existence of impairment risks also underlies our rationale for maintaining the gross value of purchased

All offset contracts will need periodic audits to determine whether an impairment or an accretion has occurred and to attest to the magnitude of any change.

Sample Flows of E-Assets and E-Liabilities

This table shows a fictitious company's flows of E-assets and E-liabilities in one reporting period.

The company begins with E-assets of 15 tons of GHG from purchases in an offset project (the planting of a forest) and E-liabilities of 20 tons from its operating activities.

The firm receives documentation from an auditor that 9 tons of its E-assets have been "earned" (that is, the forest has delivered 9 tons of GHG removal). The company "nets" this amount against its E-liability balance. On the E-asset side, the 9 tons are placed in a contra-asset account (analogous to an accumulated depreciation account for a tangible asset), signifying the portion of offsets no longer available for future netting against E-liabilities.

Later in the accounting period, the company learns that due to a forest fire, 4 tons of its netted E-assets have been impaired. This impairment triggers a write-off from its E-asset balance and an adjustment to its contra-asset account, along with a reversal from its E-liability balance of netted offsets.

At the end of the period, the firm's E-asset balance is 11 tons, of which 5 have been netted. The closing E-liability balance stands at 15 tons.

Sample E-liability account: Snapshot

E-asset (tons of GHG)		E-liability (tons of GHG)	
Purchased offsets	15	E-liabilities from operations	20
Contra-asset: Earned offset netted	9	Netted earned emissions	9
Balance	15	Balance	11
Contra-asset balance of netted offsets	9		

Sample E-liability account: End of period

E-asset (tons of GHG)		E-liability (tons of GHG)	
Purchased offsets	15	E-liabilities from operations	20
Contra-asset: Earned offset netted	9	Netted earned emissions	9
Less impairment of purchased offsets	-4		
Contra-asset adjustment	-4	Reversal of netted emissions	-4
Closing balance	11	Closing balance	15
Contra-asset balance of netted offsets	5		

removal offsets on the company's E-accounting books, with "netted" offsets recorded in a contra-asset account. With that approach, when an offset has been impaired, the impairment quantity is booked against the offset asset account, which, analogous to clawback provisions in insurance contracts, increases the net liability balance in the firm's E-balance sheet and, correspondingly, increases the quantity of E-liabilities to be allocated in the future to the firm's outputs. This treatment counteracts a company's tendency to be overly optimistic about the "nettability" of its E-asset offsets and to underestimate the E-liabilities it transfers to customers.

The five principles have important implications for how to manage and monitor the vast terrestrial biospheres, such as those in Brazil, Canada, Congo, and Russia, where much of the world's current forest offsets are stored and remain vulnerable to plunder. (See the sidebar "Accounting for 'Orphan' Carbon Deposits.") They should also promote dynamic and efficient markets to support the production and trading of new carbon-removal offsets.

A Robust Market for Mitigating Climate Change

In many ways the practices and institutions that support a functioning market in offsets resemble those that have evolved over time to serve other successful markets. To give a flavor of such a future, let's zero in on key institutions that underlie efficient markets.

Accounting and reporting. At present, reporting systems for carbon emissions and offsets are inconsistent and idiosyncratic. Many companies today calculate emissions by selectively applying Greenhouse Gas Protocol rules to some activities (such as purchasing electricity) but not others (such as employee travel) and then buying offsets that they immediately retire to achieve their self-declared net-zero targets.

> This approach will make the economics of producing carbon offsets transparent and deter offset producers from walking away from an E-asset after pocketing the unearned revenue.

A new market system, based on our principles, would have companies managing an E-balance sheet containing purchased and generated E-liabilities along with offset assets. Each period, they would add to their E-liabilities the carbon emissions acquired with product inputs they purchase and the emissions they generate through operations. They would subtract from their E-liability balance the emissions in products sold to customers and their realized and earned offsets. In this system, a firm would qualify as net zero for a given reporting year only if its closing E-liability balance at the end of that year had been matched by nettable E-assets. A similar logic would apply to the firm's individual products and services claimed to be net zero.

Sellers of offsets would also maintain E-balance sheets and financial balance sheets. From their perspective, the sale of an unearned offset—say, a newly planted tree—would lower the quantity of their E-assets and create a financial liability, listed as deferred revenue, to cover the cost of caring for the tree and protecting it against impairment. The deferred revenue would be recognized as "earned" only when the tree started removing carbon.

This approach will make the economics of producing carbon offsets transparent and deter offset producers from walking away from an E-asset after pocketing the unearned revenue from the sale of its future carbon capture (the previously described alienability risk). Likewise, if the offset seller is contracted by a buyer to renew the forest indefinitely to account for the long duration of E-liabilities against which forest offsets are netted, some portion of that deferred revenue will remain as a long-term financial liability, with the equivalent invested cash used to fund future forest-planting cycles.

Auditing. The current approach to carbon reporting, based on selective disclosures of emissions and the accelerated use of offsets, is generally unaudited. In the few instances where companies voluntarily purchase assurance services, these are usually "limited in scope," with the auditor's opinion carefully phrased in highly hedged language, such as stating that the company's claimed net-zero position is "not obviously false."

In contrast, our system of E-balance sheets, operating in parallel with financial balance sheets, can be fully audited to provide a "true and fair" representation of an entity's carbon emissions and carbon-removal offsets. Such E-audits would rely on knowledge of both environmental chemistry and accounting principles and could be performed by traditional financial-audit firms, using environmental experts, or by climate-science firms, using accounting experts. Complementary financial auditing would also be needed to monitor how offset providers account for unearned revenues and preserve capital to sustain the permanence of recognized offsets.

Accounting for "Orphan" Carbon Deposits

Substantial natural carbon stocks exist globally for which no accounting or apparent ownership exists, such as public and private forestlands and peatlands. These "orphan offsets" have significant implications for national and global carbon ledgers. In our context, these natural E-assets (public or private) have already been "netted" against past emissions and should not be sold to net against future emissions—a form of double counting of the offset.

But because the offsets embedded in these carbon stocks have never been formally capitalized, no entity is currently accountable should the offsets be reversed, such as by illegal deforestation of mature forests or the draining of peatlands due to climate change.

Full application of our five principles would require that the implicit owner of the offset (the private landowner or the government of the jurisdiction containing the land where the degradation occurred) recognize the E-liability from the carbon released into the atmosphere by the negligent, illegal, or unexpected activity. This accounting treatment, while seemingly unfair to the owners, provides them with an incentive to capitalize currently unrecognized offsets, monitor and manage the offsets for continued carbon sequestration, and pursue legal remedies against those causing their destruction.

Offset portfolio management. Given that many E-assets will be nettable only gradually and well after purchase, buyers will need to consider the mismatch between E-assets and E-liabilities in structuring funding for the purchase of offsets as well as take into account the variations in impairment risk across offsets. They should attempt to build a diversified portfolio of removal offsets that vary in terms of impairment risk, duration, and technology.

For example, an organization purchasing nature-based offsets might create an endowment-like portfolio of E-assets (such as forests of different varietals and in different regions) to offset E-liabilities indefinitely into the future. That would be similar to the portfolios of insurance companies, pension funds, and university endowments, which also have obligations stretching far into the future. Specialized firms could emerge to provide such E-asset portfolio services.

Meanwhile, E-asset providers, such as our hypothetical forest manager, will have to consider the capital implications of selling long-lived E-assets. Private-equity funds offer a potential model here. A general partner (GP) operates a fund on behalf of limited partners (LPs), providing services such as monitoring, asset valuation, auditing, and reporting over the 10-year life of a typical fund. The GP earns compensation only after LPs receive specified returns. In the context of forest projects, funds raised from LPs (such as offset buyers) would be used to purchase land and plant trees that could be sold as E-assets once they had met Principle 3's asset-recognition criteria. Once the trees began removing carbon, distributions to the LPs in terms of nettable E-assets would also begin, and the GP (the offset manager) could "earn" the revenue it had collected.

Unlike PE funds, however, a forest offset manager has a much longer time horizon than 10 years, given the obligation to capture and store carbon indefinitely. To manage this, a GP/LP contract could commission producers to provide fixed amounts of carbon removal over shorter durations at lower costs, with the expectation that buyers would be the ones to recapitalize the E-asset by investing in new forests to replace degraded ones.

Capital market participants might also develop innovative mechanisms to fund the provision of long-duration and reliable offsets. It's theoretically possible, for example, for forests or other natural E-assets to be financed at least partly through perpetual bonds structured to allow offset buyers to purchase nettable E-assets on a spot market without tying up their own capital indefinitely.

Governance. The long duration of offset production and delivery gives rise to significant counterparty risks for buyers. Financial incentives can help mitigate them, but independent bodies for regulating and enforcing offset performance will also be needed. In U.S. equity markets, for example, the NYSE and Nasdaq verify that companies whose shares trade on their exchanges comply with listing requirements, and the SEC, in turn, oversees the exchanges.

In the offset context, existing registries might convert from their current passive role as transactional intermediaries into something like exchange authorities. Alternatively, they might function as a reciprocal or mutual insurer, operated by and for the benefit of the insured. In this model, an offset purchaser would pay a premium to the insurer to guarantee the offset's success over the long term. Different registries and insurers might specialize in specific types of offsets, and they would develop the expertise to price and manage the risks of the guarantees.

What we've described is an early sketch of a thriving economic sector that advances human well-being by combating climate change. Our accounting principles provide a bedrock for a comprehensive market-based solution for carbon-emissions management.

IN THE 1940S William Temple, the archbishop of Canterbury, wrote, "The art of government…is the art of so ordering life that self-interest prompts what justice demands." By introducing the five offset accounting principles in this article, we hope to bring order to the current Wild West of offset trading in a way that directs the powerful forces of human competition and innovation to the challenge of reducing atmospheric carbon. As Temple implicitly acknowledged, most attempts by governments and elites to direct and manage grand projects from above are doomed to fail. A more plausible approach is to set clear, measurable goals, design the appropriate rules of the game, and then leave the results to the players.

HBR Reprint R2304K

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MANAGING YOURSELF

Why It's So Hard to Ask for Help

And how to get past what's blocking you

by Manfred F.R. Kets de Vries

MARTHA WAS UNDER a lot of stress. Her company's supply chain was experiencing major disruptions, requiring her team to put in extra time. Even though her people were highly qualified, she was very reluctant to ask any of them to do more. They already had enough on their plates, she believed, and it was her responsibility to step up. She had the same attitude toward her boss. Martha didn't want to approach him for help, figuring that if she did, he wouldn't be pleased.

Then there were the pressures in her personal life: Her children were still very young, needing a lot of attention, but she knew that getting her husband to pitch in more would be an uphill battle. His job was demanding and took a lot out of him. He also was deeply

Illustrations by **LARISSA HOFF**

> It’s important to acknowledge when you’re working beyond your individual capacity and be open to seeking assistance.

involved in sports—something she felt he needed to do to relax. So it just seemed easier to manage the family and household responsibilities herself.

Does this sound familiar? Although humans are social creatures, ready to both give and accept help, many of us struggle to actually ask for it. Over time that can make us miserable and bitter. And with the shift toward remote work now leaving many of us isolated from our colleagues, the challenges of asking for help have only intensified.

Of course, there’s nothing wrong with being self-reliant. It’s a much-admired trait in our society. But if you want to be fulfilled and successful at work, it’s important to acknowledge when you’re working beyond your individual capacity and be open to seeking assistance.

How can we learn to do this? Let’s begin by looking at where the reluctance comes from.

WHAT GETS IN THE WAY

As a psychoanalyst, executive coach, and professor of leadership development, I work to understand the psychological processes underlying people’s reactions and behaviors. I’ve identified a number of common patterns driving the “go it alone” mentality.

The fear of being vulnerable. For people who are insecure and preoccupied with others’ perceptions of them, asking for help feels like a sign of weakness. They’re afraid that it will make them look incompetent and inferior. Some might also suffer from (a usually unjustified) impostor syndrome and worry that others will see through their carefully constructed facades. So they keep people at arm’s length and try to manage everything on their own.

The need to be independent. When you prioritize self-reliance and self-sufficiency, asking for help feels uncomfortable. Perhaps because of their family and cultural backgrounds, many people believe they should be capable of handling everything solo. Programmed to play lone ranger, they tend to struggle in situations where the emphasis is on teamwork. Independence is critical to their self-image.

The fear of losing control. Some people won’t ask for help because they don’t want to be beholden to anyone. They may have trust issues and dislike putting themselves in the hands of other people. The power shift that a help request might generate makes them uneasy. Consequently, they would rather carry the burden of their problems alone.

The fear of rejection. Many of us overestimate the likelihood that the people we’re asking for help will say no. For those who associate rejection with an attack on their self-worth, that’s a big obstacle. They don’t seem to realize that there could be many reasons why a person who was being asked for help wouldn’t be available.

Overempathizing with others. Some people are so attuned to the emotions of others that they anticipate reactions, such as feeling burdened, that might not materialize. They won’t request help because they don’t want to be seen as entitled, selfish, or bothersome. They feel they must win love by taking care of and protecting others while hiding or ignoring their own needs.

A sense of victimhood. People who go through life thinking *I don’t deserve to be helped; I’m not worthy* rarely seek support. Constantly hearing this inner voice, they develop a “poor me” attitude and believe it’s their fate to sacrifice and struggle on their own.

Clearly, many of the people caught up in these behaviors have self-esteem issues. They are highly self-critical and often don’t believe they’ve earned the privilege of asking for others’ time and energy. Sometimes they don’t even understand what they really need or how others can help them. Adverse childhood experiences like neglect and abuse may have contributed to their reluctance. People who have endured abuse often try to be invisible by making very few demands.

But history isn’t destiny. Once you’ve figured out why you avoid asking for help, it’s possible to change your behavior.

REWRITING THE INNER SCRIPT

Drawing on my work with many high-performing executives who struggle to ask for help, I’ve identified a number of ways that people can get better at it. Here’s how I used them in Martha’s case.

Seek counsel. Martha came to me after one of her friends suggested that she see a coach or a therapist. He noted that such people are in the profession of helping others—they get paid for it—so asking for their assistance might feel more comfortable to her. After some hesitation she made an appointment with me, and during our first few sessions she got a taste for how good it

felt to be supported and championed. We talked about what was preventing her from seeking help and discovered that it was a pattern she'd picked up in childhood. With an absentee father and a depressed mother, she'd fallen into playing the caretaker role, always giving support but never expecting to get it from others. We worked to build her self-confidence and self-awareness and got her to accept that she would burn out if she didn't ask for help.

It's my hope that those of you who struggle to seek help can explore your blockages yourself and recognize on your own the importance of getting over them. Reading this article could be a great first step. But if you find you need further encouragement, digital technology has made it easier than ever to find the right coach or therapist.

Reframe. Martha also needed to reframe the problems she was facing. I wanted her to see asking for assistance not as burdening her husband or colleagues but as giving them an opportunity to step up and contribute to the success of the family or the team: a win-win proposition. Martha found that when she did ask a few of her direct reports to research potential new suppliers, they were excited to do so. When you place trust in others, you show that you value them, which deepens the relationship. In turn they'll trust you enough to ask for help when they're in need themselves. Indeed, after reaching out to a few people for advice and assistance on minor matters, Martha discovered that those people now viewed her as more approachable and would often seek her opinion.

I also encouraged Martha to consider the consequences for everyone if she continued going it alone. Inevitably, something would fall through the cracks, which would negatively affect not only her but also others. From that perspective, asking for help can be seen as a service to the greater good.

We also worked on reframing rejection. Yes, people might be unable or unwilling to honor her requests. But they might point to alternative solutions or teach her how to formulate requests better in the future.

Take a SMART approach. SMART is an acronym for *specific, measurable, achievable, relevant,* and *time-bound*. A SMART request will detail the help you need, explain why you need it, suggest steps the people you're asking could take, ensure that it's within their ability to do so, and spell out when you need things done by. Part of Martha's problem was that she often didn't know whom to ask for help or how to start

> You should position a help request as a conversation to explore possibilities rather than a transaction.

those conversations. I explained that when she was feeling overextended, she should first think about who might have the skills, ability, and knowledge to help her and who would be most likely to say yes to an entreaty. She would then need to use the SMART guidelines and clearly communicate her request.

We also discussed the importance of timing and tone. You don't want to ask people for help when they're stressed-out or in a bad mood, and you have to give them ample time to consider whether they can meet your needs. You should also position the request as a conversation to explore possibilities rather than a transaction.

During one of my talks with Martha, I had a lucky break that helped me teach her what the SMART approach was all about. She mentioned to me that she had received an urgent request from the CEO to provide a list of suppliers that were manufacturing the high-grade specialty components needed for the company's factories (including an estimate of possible quotas and timelines). He had given her a deadline of a week. Obviously at her wit's end, Martha complained to me that the request concerned an area of the business she was only superficially familiar with. After some prompting, however, she noted that there was a senior executive in manufacturing who knew it well. She also commented that given his responsibilities, it would be in his best interests to have access to the information the CEO wanted; it was highly relevant to his work. I suggested that enlisting his help would be a win-win for both of them.

Not long after that, Martha contacted this executive and asked for his assistance. Not surprisingly, he didn't take much persuading. His knowledge about the manufacturing area made fulfilling her request quite achievable, and with his contributions she was able to get the information to the CEO in time.

Communicate. Martha's stoicism was making it hard for others to get to know her and precluding the possibility that colleagues, friends, or family members would recognize that she needed help and volunteer it without her even asking. I encouraged her to communicate more openly and authentically—for example, by disclosing when she was feeling too much pressure. When she showed vulnerability to her husband, admitting that she couldn't do it all at work and at home, he was much more prepared to lend a hand.

I also recommended that Martha spend more casual time with her coworkers. For example, instead of always bringing her lunch to work and eating at her desk, she could go to the cafeteria regularly, which would give her opportunities to talk with her colleagues about the challenges she was up against. Those conversations might pave the way for a mutual problem-solving session or for a peer to become more actively involved on her behalf. Martha quickly discovered the value of this new habit when it enabled her to get help with an unreliable supplier from a colleague who had faced similar issues with that supplier in the past.

Practice. As with any other skill, asking for help gets much easier with practice. I proposed that Martha start by reaching out to someone she was comfortable with, perhaps a family member or a trusted coworker.

She decided to approach one of the parents at her children's school with a SMART request, asking if he'd be open to the idea of carpooling a few days a week for the rest of the term. Previously, she had driven the kids to school by herself (with the occasional help of her husband). Martha was surprised by the enthusiasm of the response she got. It encouraged her to progress to someone she knew less well: an old classmate from her university who worked in a similar role at another company. Martha reached out to her to see if she'd be willing to meet once a month to discuss any knotty issues they might be dealing with.

The monthly brainstorming sessions, during which Martha presented some of her key challenges, were great practice for her. Her classmate turned out to be a fantastic sounding board and very solution oriented. Furthermore, those conversations weren't one-sided: Martha realized she was also being very helpful to her former classmate. During their sessions they both found solutions to problems they were dealing with.

I suggested to Martha that when someone did agree to give her assistance, she should try to receive it gratefully. She could even let that person take ownership of the task. Interestingly, as Martha started reaching out to people, she was initially surprised by their eagerness and ability to give her the help she needed. She soon realized that nearly everyone was more keen to say yes than to say no, and she began to enjoy the companionship that arises when people rely on one another to work toward a common goal. Although asking for help would never be an instant, natural reaction for her, she was now able to do it much more regularly.

ASKING FOR HELP is not a sign of weakness. To the contrary, it can be one of the more courageous things you can do. It can also improve your relationships and free up time for you to focus on your most mission-critical tasks at work and at home. So don't make the mistake of always trying to go it alone. Be smart enough to know when you need help and to ask for it effectively.

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Harvard Business Review

Don't let your writing hold you back.

SMARTER THAN THE AVERAGE GUIDE
HBR Guide to
Better Business Writing
Engage readers
Tighten and brighten
Make your case
By Bryan A. Garner
Harvard Business Review Press

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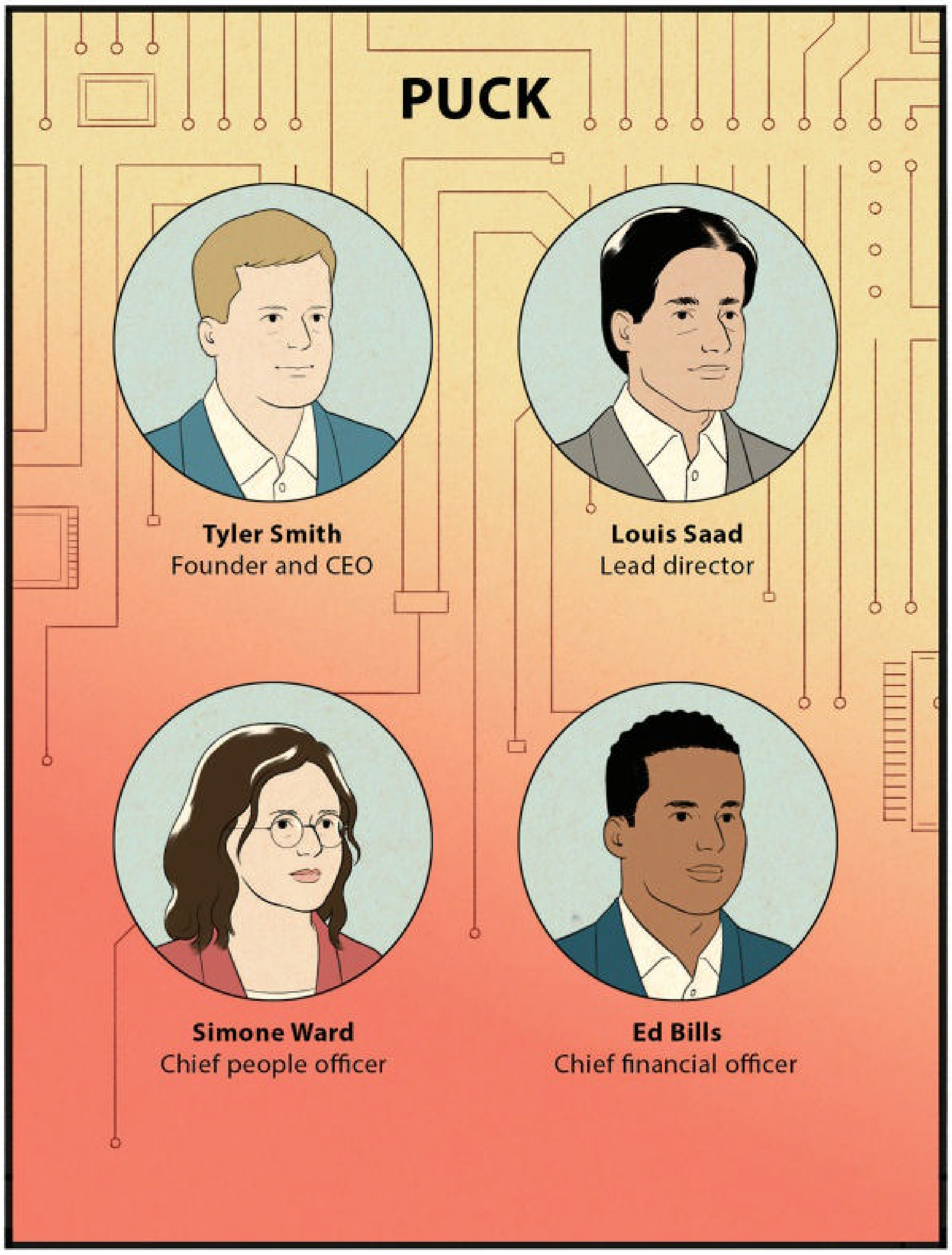
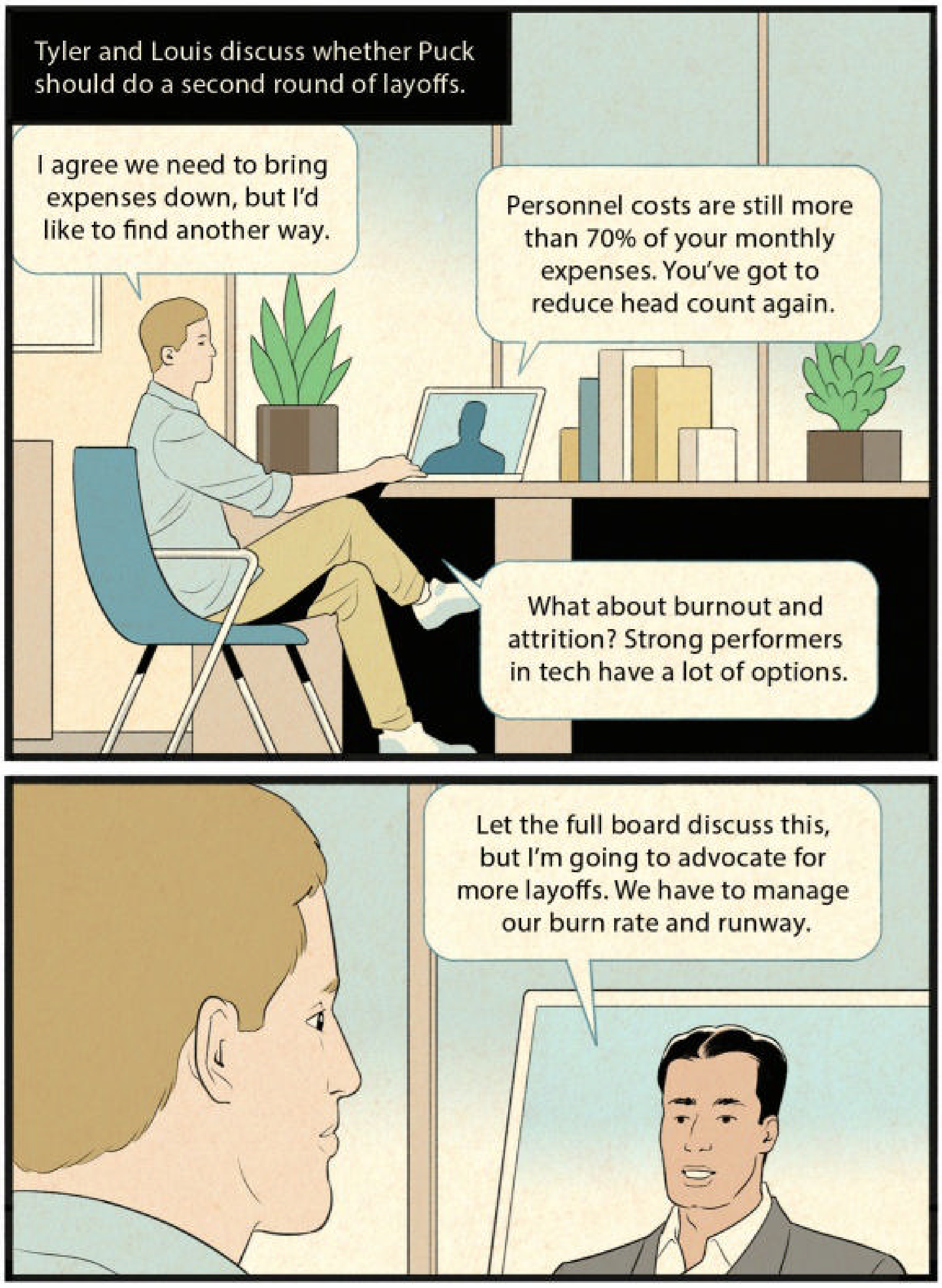

PUCK
Tyler Smith
Founder and CEO
Louis Saad
Lead director
Simone Ward
Chief people officer
Ed Bills
Chief financial officer


Tyler and Louis discuss whether Puck should do a second round of layoffs.
I agree we need to bring expenses down, but I'd like to find another way.
Personnel costs are still more than 70% of your monthly expenses. You've got to reduce head count again.
What about burnout and attrition? Strong performers in tech have a lot of options.
Let the full board discuss this, but I'm going to advocate for more layoffs. We have to manage our burn rate and runway.

Case Study

How Should a Start-Up Cut Its Burn Rate?

by Nitin Nohria, Katie Josephson, Sophia Wronsky, and Elizabeth Rha

HBR's fictionalized case studies present problems faced by leaders in real companies and offer solutions from experts. This one is based on a case prepared by the authors for use in a series of workshops to engage portfolio company CEOs at Thrive Capital.

TYLER SMITH, THE founder and CEO of Puck.io, joined the Zoom meeting and greeted Louis Saad, a venture fund partner, his largest investor, and Puck's lead director. It was four days before the company's board meeting, and they had a lot to discuss.

Just 18 months earlier Puck's trajectory had looked fantastic. An enterprise software company, the four-year-old start-up had completed a $100 million funding round at a $2 billion valuation and was on track to achieve $100 million in revenue for the coming year.[1] When its head count reached 500, Tyler took a lease on a large New York office space. The goal was to take the company public in two to three years.

But then tech stocks had started to slide as the Federal Reserve began raising interest rates to fight inflation. IPOs were postponed, and VCs began advising their portfolio companies to cut costs. Louis, who'd founded two successful start-ups and a third that went bankrupt during the Great Recession—precipitating his shift into venture capital—was especially vocal about the need to aggressively reduce expenses and lengthen Puck's funding runway.

Illustrations by **ANUJ SHRESTHA**

Having asked the board for more time to study the numbers, Tyler dives into workforce and burn rate data.

At the board's urging, Tyler had laid off 20% of Puck's staff three months before, with the cuts spread across all functions. Now Louis was pushing for a second round of downsizing.

"Thanks for the email," Tyler said, kicking off the meeting. "I agree that we need to bring our monthly operating expenses down even further. I intend to do that. But I'm worried about morale. I'd like to find another way to cut costs."

"I get it—I've been in your shoes," Louis replied. "Your team has done a great job of scaling up. I've been happy with most of your spending choices over the past year, especially the new office space, even though it's used less than we'd like. But we don't know how long it will take for the markets to stabilize, and personnel costs are still more than 70% of your monthly expenses, so you have few other options. You have to eliminate some perks and—I hate to say it—reduce head count again."[2]

Louis was a persuasive presence on the board, and Tyler had embraced his perspective in the past. But Tyler was also proud of Puck's fun, hardworking, performance-oriented culture. Another round of layoffs might cause the team to lose faith in his leadership.

"People haven't recovered from the last round of layoffs," Tyler replied. "We already have too few people doing too much work, and I'm worried about burnout and talent flight. Other tech companies are reducing head count, but tech unemployment overall remains low. Strong performers have lots of options."

"I'm content to let the full board discuss this on Friday," Louis said. "But I want to be transparent: I'm going to advocate for more layoffs. In this environment you have to manage burn rate and runway—everything else is secondary. If you don't, there's a good chance you'll need more funding soon,[3] which you may have to raise at a flat or lower valuation. It will be tough to get investors to participate if they don't see decisive action."

RUNWAY ISN'T EVERYTHING

After Louis made his pitch at the board meeting, Tyler asked for a couple of weeks to study the workforce and burn rate numbers and report back. A few days later he met with Simone Ward, Puck's chief people officer.

"Before we discuss more layoffs, let's look at where things stand now," Simone said, tilting her screen toward Tyler. "This is the latest employee engagement survey." One chart showed that the percentage of employees who "rarely think about looking for a job at another company" had dropped from 57% (well above the average at peer companies) to 42% (below average). Another showed a 10% drop in employees who said, "I see myself working here in two years."

"When numbers start dropping like this," Simone said, "they tend to keep falling. We need to fix this."

"How?" Tyler asked.

"Let's finish talking about our retention and recruitment problems before we start thinking about solutions," Simone said. "Take Renee, for example." Renee Nichols, Puck's VP of sales, had given notice to take a job at Microsoft, citing concerns about Puck's stability and the value of her shares.

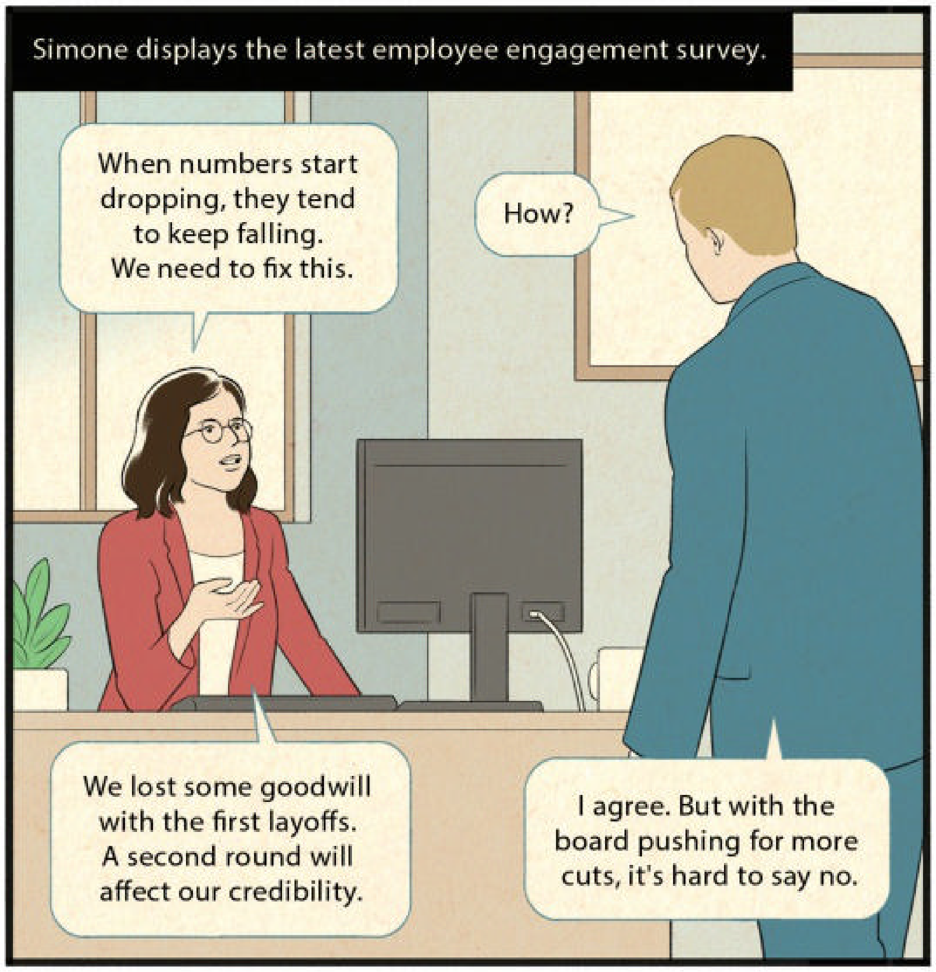
"The problem is not just that people see stars like her leaving," Simone said. "It's been 10 days since we offered Chris Jones the VP of growth role, and we're still negotiating. He's not sure he should leave Axis even though we're offering him a higher salary and a more senior role."

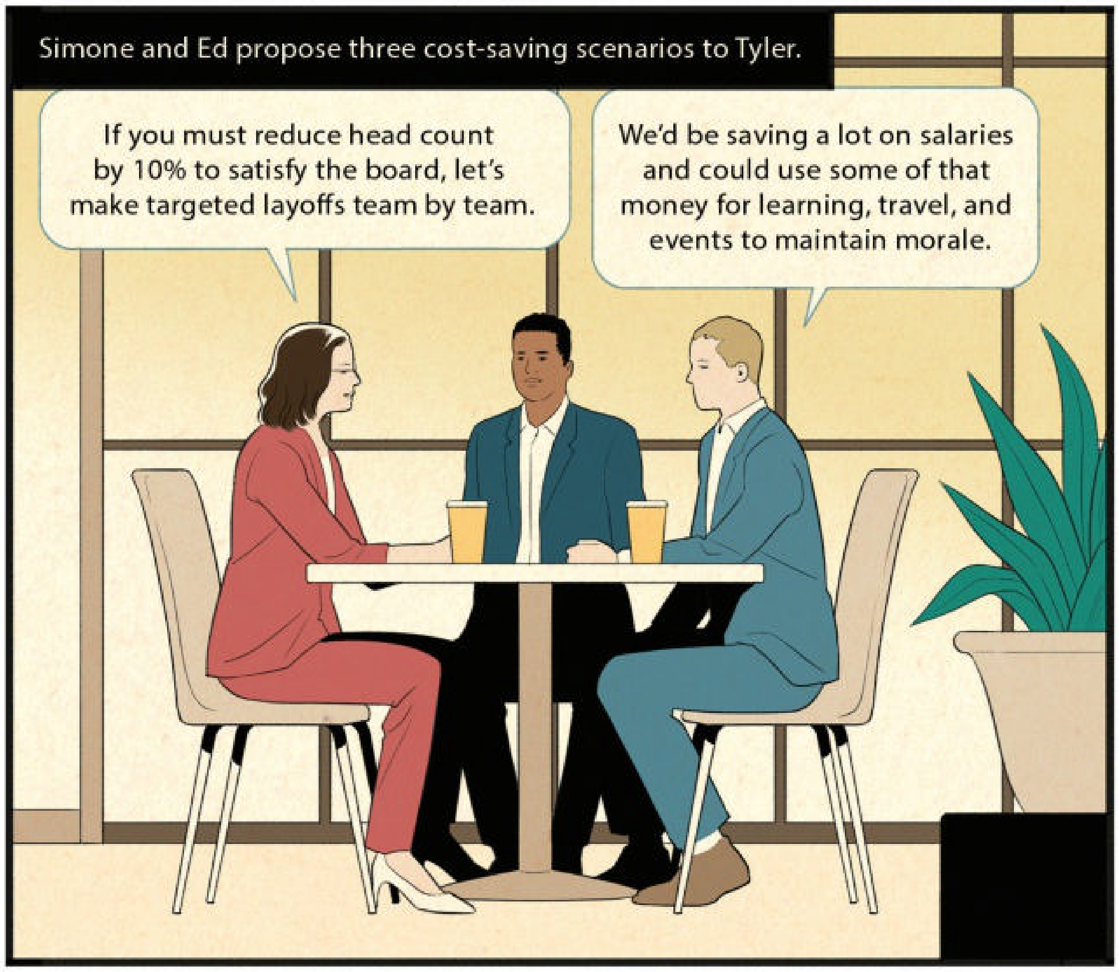
Case Study Classroom Notes

1. *In 2020 software-as-a-service start-ups receiving Series D or later VC funding had a median pre-money valuation of $580 million.*

2. *Are Louis's concerns about burn rate reasonable in this climate, or is he fixated on costs because of his past?*

3. *VC funding has dropped, in part because the number of exits declined from 1,925 deals valued at $753 billion in 2021 to 1,208 deals valued at $71 billion in 2022.*


Simone displays the latest employee engagement survey.
When numbers start dropping, they tend to keep falling. We need to fix this.
How?
We lost some goodwill with the first layoffs. A second round will affect our credibility.
I agree. But with the board pushing for more cuts, it's hard to say no.


Simone and Ed propose three cost-saving scenarios to Tyler.
If you must reduce head count by 10% to satisfy the board, let's make targeted layoffs team by team.
We'd be saving a lot on salaries and could use some of that money for learning, travel, and events to maintain morale.

Tyler had interviewed Chris and been impressed: He was strategic, hardworking, and a great people leader. But Axis offered Chris great benefits, whereas Puck's health care plan required relatively high out-of-pocket premiums, its 401K match was weak, and its annual bonus plan was less generous. Chris was pushing for even more money and a significant equity grant to compensate.

"That's a lot of asks when we're cutting costs," Tyler said.

Simone spoke evenly: "Chris's case just illustrates a trend. Even though we've done a round of layoffs, we still face critical hiring needs, and we're getting feedback that our compensation and benefits package aren't competitive."[4]

Tyler frowned. "Is there more?"

"Yes—there's Alan," Simone said, referring to their brilliant VP of engineering. Rivals were constantly trying to poach him and his team. "He's asking for a discretionary fund for selected salary increases, new software tools, and team-building events like their annual ski trip."

Tyler sighed. "Does he realize we're trying to *cut* costs?"

"I know," Simone said. "But if we say no, chances are he'll leave, and lots of his team will follow."

"Okay, let's try to settle a few of these things," Tyler said. "First, let's go with your idea to double down on talent development programs to improve engagement. I want people to know we're investing in their growth. Second, please try to stretch on Chris Jones's equity, but let's build in clear performance milestones and tell him we're committed to improving our benefits over time. Third, tell Alan he can't have an exclusive discretionary fund, but we will do a comprehensive review of his top performers' compensation. And I'll schedule a one-on-one meeting to get him on board."

"Got it," Simone said. "Have you decided what you want to do about a second round of layoffs?"

"Not yet," he said. "What do you think?"

"It's a mistake to focus exclusively on runway," she replied. "You have to balance that with the fact that you need a great team motivated to work here. We lost some goodwill with the first layoffs. A second round will affect our credibility, and it will be tough to convince the team that the future here is bright."

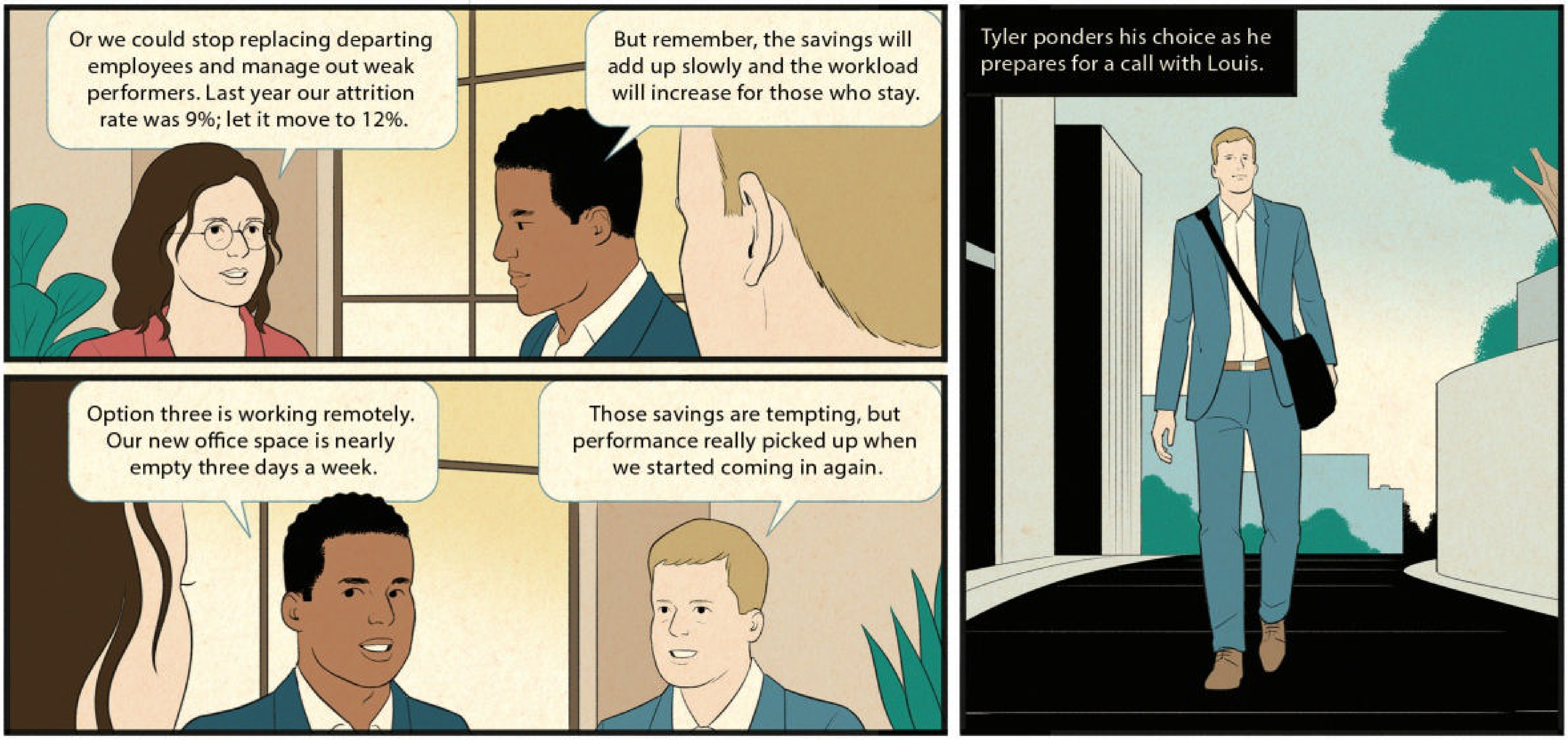
"I agree," Tyler said. "But with the board pushing for more cuts, it's hard to say no."

THREE COST-SAVING OPTIONS

Over the following week Tyler noted headlines about the many large and small tech companies[5]

4. *If Tyler sweetens the offer for Chris, should he worry that existing employees who may not have received such rich deals might learn about it and be upset?*

5. *Data from Crunchbase shows that 9% of the start-ups it tracked did two rounds of layoffs in 2022. In the first quarter of 2023 the tech giants Facebook and Amazon announced second rounds of employee cuts.*


Or we could stop replacing departing employees and manage out weak performers. Last year our attrition rate was 9%; let it move to 12%.
But remember, the savings will add up slowly and the workload will increase for those who stay.
Option three is working remotely. Our new office space is nearly empty three days a week.
Those savings are tempting, but performance really picked up when we started coming in again.
Tyler ponders his choice as he prepares for a call with Louis.

announcing layoffs. Louis continued to argue that laying off 10% of the staff represented an opportunity to part ways with the quiet quitters, poor performers, and employees reluctant to come back to the office. Puck's new offices were nearly empty most Mondays and Fridays, and some employees weren't coming in at all.

Simone and Ed Bills, Puck's chief financial officer, had worked over the weekend to put together a few scenarios for reducing the burn rate. On Monday they asked Tyler to sit down with them, and they laid out three options for him to consider.

"If you see no choice but to do a 10% head count reduction, we should make targeted layoffs, team by team, instead of an across-the-board cut that affects all teams," Simone said. "We'll also need to adjust the product road map to reflect the reality that fewer employees will accomplish less."

Ed pointed to one upside of this plan: Because they'd be saving money on salaries, they could preserve some budget for learning and development, food, travel, and events to maintain morale. Still, Simone warned, doing layoffs twice within a year would have a negative impact—and some star employees might head for the door.

As an alternative to more layoffs, the trio discussed another, two-pronged approach. To reduce head count, Puck could stop replacing departing employees and do more to manage out weak performers. Attrition the previous year among people Puck wasn't sorry to lose had been low at 9%, Simone explained. But they could let that number move up to 12%. The company could further reduce spending by cutting the budget for events and food, removing low-usage benefits and perks, and pulling back on other areas of spending on contract and vendor services and marketing, which had increased over the past few months. "If we communicate about this the right way, people will understand that we're making these sacrifices to avoid more layoffs," Simone said. "I think the damage to the culture and performance will be less than if we put more people out of a job."

"But remember," Ed chimed in, "when you cut people costs through attrition, the savings come more slowly and less predictably, and the increased workload for those who stay may lead to burnout, lack of trust, and unwanted departures."[6]

He offered a third option: "I love our new office space, but the reality is that it's nearly empty two days a week. We could move to a remote-first model, sublease

6. *Relying on attrition to cut costs can be slow and unpredictable, but there is an upside: Companies needn't pay severance or extend benefits to employees who resign.*

the entire office, and ask people to work from home or from lower-cost coworking spaces. I think that could save us roughly $5.5 million to $6.5 million annually."

"Those cost savings are tempting," Tyler said, "but I still worry about our culture and collaboration. We made it through the early days of the pandemic, but performance really picked up when we got back to the office."

Simone nodded. "True. But this could be an opportunity. If we go with this plan, we can invest at least some of what we save in other drivers of employee engagement, like learning and development."

Tyler thought back to the all-hands meeting where he'd announced the first layoff—a painful memory. If he announced another round of job cuts, putting another group of employees out of work, would he still have credibility as a leader?

He swung by the office to pick up his laptop and then began the walk home. He had a call scheduled with Louis for 8 o'clock the next morning, but he still didn't know what was best for Puck.

NITIN NOHRIA *is a professor at Harvard Business School and the chairman of Thrive Capital, a venture capital firm based in New York.* **KATIE JOSEPHSON** *is a partner,* **SOPHIA WRONSKY** *is a director, and* **ELIZABETH RHA** *is a consultant at Thrive Capital.*

What should Tyler do? The experts respond.

PATRICK PETTITI *is the founder and CEO of Catalant Technologies, a Boston-based software company.*

Tyler's situation is relatable.

The tension at Puck among employee engagement, top-line growth, and expenses is real. The challenge for its leaders is finding the right balance, which is especially hard in such an uncertain market. If I were in Tyler's situation, my number one priority would be to preserve capital while ensuring that my employees had what they needed to be successful.

Unfortunately, the attrition strategy isn't viable, in my opinion. When you use performance management to drive people out, as Facebook has reportedly begun doing, it looks like a rolling, unannounced layoff, which is worse than a formal one. Good managers and organizations review and rate team members to support and improve their work, not to reduce head count. Puck shouldn't risk its reputation as an employer by taking that approach.

Layoffs may prove necessary, but if Tyler goes that route, he needs to choose the percentage of head count carefully and then guarantee that the reduction will be the last one. If he'd made a deeper cut in the first round, his lead director might not be pushing for a second one so quickly. Two layoffs in a year is bad; three would be much worse.

Tyler could choose to raise capital instead. Although Puck's trajectory has slowed, revenue is still growing, so if cash gets really short, he might be able to bring in more money through a flat round. I wouldn't advise taking a significant amount of additional financing at a lower valuation—a down round; that's likely to hurt employee engagement too, because it affects the value of employees' equity.

I would also look seriously at eliminating the office. Many organizations—including ours—have considered that option. We recognize the importance of a place to create community and for people who prefer not to work at home. But the reality is that most desks are empty most days, so this is a large expense that everyone should examine.

SHAN-LYN MA *is a cofounder and the CEO of Zola, an online wedding registry and planning company.*

I worry that Tyler is isolated.

He's receiving a lot of information secondhand from the chief people officer about issues in which I'd expect a CEO to be directly involved—for example, in the hiring of a key employee. So I'd advise him to reengage with his top team and make this a collaborative decision.

Puck's senior leaders should decide what to cut on the basis of their evolving strategy. Their B2B customers will be under budget pressure too; how should that inform the company's priorities going forward? This approach will help everyone understand that cash is no longer free-flowing. It will get the entire team involved in finding a solution. And Puck's leaders can present it to the rest of the company as a united front.

Relying on attrition is the riskiest of the options on the table. The company would have no control over who might leave. It would risk losing good people in roles that must be filled while retaining some people who are in noncrucial ones. And the speed of attrition would be unpredictable.

I don't think Puck should give up the whole office space. It has built a successful culture, and working face-to-face enhances that. Productivity went up when people went back to the office. Puck should consider subleasing excess space or even sharing space with a sublessee on days when its employees don't come in.

That leaves layoffs, and at this stage I think a second round is absolutely the right move. In fact, I'd tell Tyler to reduce Puck's head count by significantly more than 10%. A minimum of 20% would be my recommendation. The company's burn rate relative to revenue is no doubt too high, and most of that expense comes from people costs. Making no change could mean running out of cash in a year with no idea what the funding environment will look like. So Puck needs to extend the runway—quickly.

This dynamic can be seen across the tech industry, not only at start-ups. Facebook, Google, Amazon, and many others expanded head count aggressively over the past few years and now have to pull back. If the world's most profitable companies are facing layoffs, Tyler and his team shouldn't feel bad about having to make them too. But communication will be key. The leadership group needs to put policies (such as severance) in place, clearly explain why the cuts are necessary, and then work to motivate, engage, and develop the remaining employees—and keep them excited about Puck's future. ⊜

HBR Reprint R2304M
Reprint Case only R2304X
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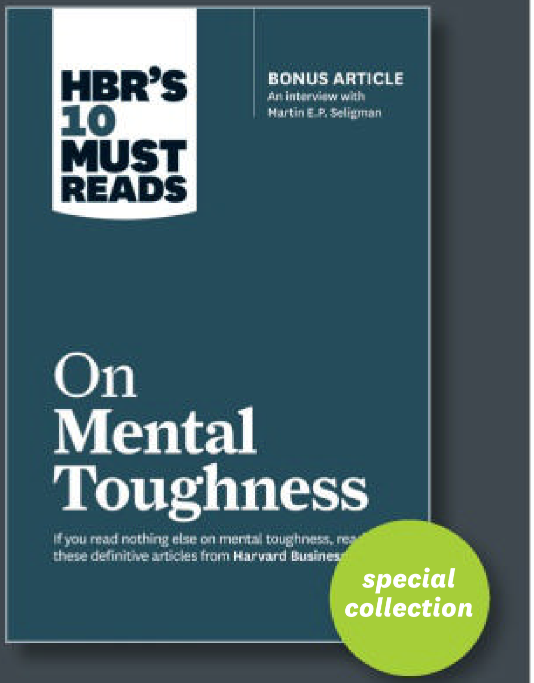
Harvard Business Review

NEED TO TOUGHEN UP AT WORK?

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SYNTHESIS

The Power of Words

How language connects, differentiates, and enlightens us

by Lucy Swedberg

ABOUT A YEAR ago, a friend suggested that I enroll in an adult tap-dance class held at our town's community center. The suggestion wasn't as random as it might seem. For nearly two decades in my youth, I had loved tapping in classes and onstage. And when I laced up those black leather shoes after a nearly 20-year hiatus, I felt instantly at home.

What surprised me most about my tap renaissance wasn't how quickly the steps came back to me. It was how the language of tap, the utterance of words I hadn't voiced in decades, energized me: *triple-time step, riff walk, cramp roll, back essence*. The teacher would say the words, and my feet would tap into action.

The Power of Language, written by Viorica Marian, a psycholinguistics researcher, helped me understand what was going on. At a young age I had become fluent in tap. Tap is a code of communication that changed my brain, opening me up to new knowledge and new experiences. I hadn't used that language in a long time, and now I was reactivating it.

Marian explores the power of multilingualism like mine and the more typical type—being fluent in, say, English, Korean, and JavaScript. She explains that although the majority of people in the world speak more than one language, most research to date has been on monolingual populations, so we're only beginning to understand the power of the multilingual mind.

When you know multiple languages, you understand that meaning is assigned, not inherent. You extract and interpret information differently, and you're more attuned to how words make you feel. All of that yields benefits, she notes. People who are multilingual develop critical-thinking and other higher-order skills more quickly as children. They perform better on executive-functioning tasks like following multistep directions and staying focused despite distractions. They draw

Illustration by AMRITA MARINO

There's value in thinking deeply about each word we use: how it expresses a particular concept and how people from different backgrounds might experience it.

more novel connections and are more open and accepting than monolinguals. "If you can appreciate firsthand the utility and beauty of another language and worldview, it is not hard to imagine you are less prone to bigotry, to demonizing things or people who are different from you," Marian explains.

The lauding of linguistic difference continues in ***A Myriad of Tongues.*** Author and language researcher Caleb Everett notes that more than 7,000 languages exist today, although most people struggle to name more than a few dozen. Historically, academics have looked for commonalities among languages and focused mainly on those used by Western, educated, industrialized, rich, and democratic (WEIRD) societies. But, Everett says, the tide is shifting. Recent research has focused on how languages diverge—and what those differences can tell us about how we think and behave.

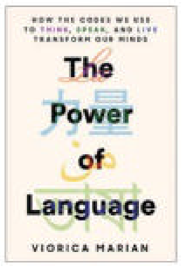
His book synthesizes his own and others' research that brings in data from non-WEIRD languages and broadens our understanding of how words affect cognition, including how we process the concepts of time, space, color, and kinship. In the indigenous Karitiâna language spoken in northwestern Brazil, for example, the terms used to refer to a relative depend on the gender of the person speaking, not just the gender of the person referred to. There's a sense of symmetry and reciprocity in Karitiâna that doesn't exist in English.

Once leaders understand the power of language, they can harness both differences and similarities to wield influence. As Jonah Berger, a Wharton professor and natural-language-processing expert, explains in ***Magic Words,*** there are specific words that, when used in the right way at the right time, are more impactful than others—at changing minds, engaging audiences, and driving action.

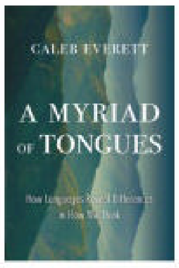
For example, in the workplace, a shared organizational language (such as start-up founders' use of the word "pivoting," retailers' use of "omnichannel," or entire teams' use of more personal pronouns like "we" or "I" instead of the more distanced "they") "can facilitate conversation, make people feel connected, and increase their perception that they are part of the same tribe," Berger writes. This can increase feelings of trust and affiliation—and even the likelihood of promotion.

But when we seek creativity or memorability, a common vernacular isn't always a good thing. Tired marketing copy or predictable slogans, for example, are easy to forget. When unexpected words are assembled in a distinctive way, they stick. That's why the musical *Hamilton* was such a hit, Berger notes; its style diverged from what theatergoers were used to.

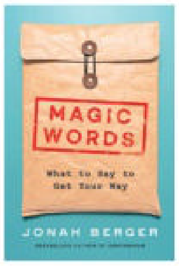
Berger's book reinforces my belief as an editor—and should remind us all—that there's value in thinking deeply about each word we use: how it expresses a particular concept or nuance and how people from different geographies, cultures, and backgrounds might experience it.


How the codes we use to think, speak, and live transform our minds
The Power of Language
Viorica Marian

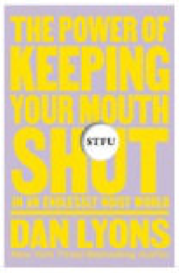
The Power of Language
Viorica Marian
(Dutton, 2023)



A Myriad of Tongues
Caleb Everett
(Harvard University Press, forthcoming)



Magic Words
Jonah Berger
(Harper Business, 2023)



STFU
Dan Lyons
(Henry Holt, 2023)

And yet, amid so much admiration for the power of words, the screenwriter and journalist Dan Lyons reminds us in ***STFU*** that sometimes our best move is to stop using them. When you sit back and let people talk, he explains, you get more and better information. Listening is a leadership superpower.

Lyons's book brims with specific suggestions for how to shut off—on social media, at work, at home, in love. We can delete apps from our phone, keep meetings small and short, stop nagging about chores, and pause and breathe before saying something that we'll regret. "All of us, not just overtalkers, stand to gain by speaking less, listening more, and communicating with intention," Lyons writes. We can appreciate words and language but realize that our sparing and intentional use of them is a pathway to happiness.

Lyons helped me pinpoint another thing I love about my tap class—it's 60 minutes a week when I can let my shoes do the talking.

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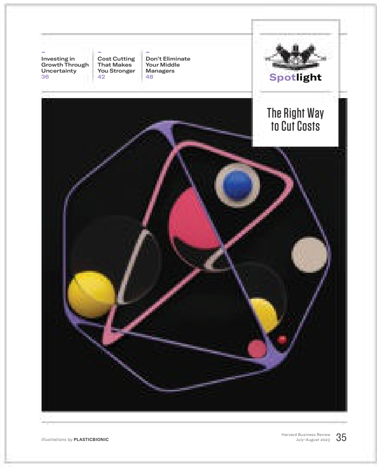
LUCY SWEDBERG *is an executive editor at Harvard Business Publishing, focused on education.*

Executive Summaries
July–August 2023

SPOTLIGHT



The Right Way to Cut Costs

"Efficiency" has become a corporate watchword as the era of cheap capital has ended. Amid layoffs and uncertainty, this Spotlight explores how companies can reduce short-term expenses without missing out on long-term opportunities.

page 35

Each article in this Spotlight is available as a single reprint. The complete Spotlight is also available as a package.
HBR Reprint R2304B

Investing in Growth Through Uncertainty

Ranjay Gulati | page 36

When faced with disruptions and downturns, many leaders and companies instinctively focus on cutting costs to maintain profitability. But some identify opportunities and then take thoughtful action to emerge from crisis even stronger. That means not only planning for worst-case scenarios and pressure-testing operational and financial health but also staying alert for ways to find a winning edge and making needed investments. Those leaders do so by fostering three mindsets: *sensemaking in crisis, a bootstrap ethic,* and *stakeholder balance.* Examples from Alaska Airlines, Firefly, Panera Bread, and Edward Jones show how this works in practice. Leaders who embrace these ways of thinking can chart a course for the future even when the outlook is darkest.

HBR Reprint S23041

Cost Cutting That Makes You Stronger

Vinay Couto, Paul Leinwand, and Sundar Subramanian
page 42

When so much in the world feels beyond our control, costs are to a large extent controllable. But cutting them to drive short-term savings is a mistake. When companies take a one-off approach to cost cutting, they often sacrifice some of their most important investments. If cost-cutting programs are implemented in haste, little (if any) debate over the strategic intent of investments takes place. To the contrary, leaders typically dole out across-the-board targets, leaving organizations weaker, imbalanced, disjointed, and in some cases desperate and without direction. In this article the authors identify five keys to ensuring that companies build an efficient, effective culture around costs that works in both good times and bad.

HBR Reprint S23042

Don't Eliminate Your Middle Managers

Emily Field, Bryan Hancock, and Bill Schaninger | page 48

Organizations have long seen middle management as ripe for cutting whenever times get tight, and the current moment is no exception. The authors believe that this is a costly mistake. Human capital, they say, is at least as important as financial capital, and middle managers, who recruit and develop an organization's employees, are the most important asset of all—essential to navigating rapid, complex change. They can make work more meaningful, interesting, and productive, and they're crucial for true organizational transformation. But if managers are to fulfill this promise, leaders must reimagine their roles, push to more fully understand their value, and train, coach, and inspire them to realize their potential as organizational linchpins.

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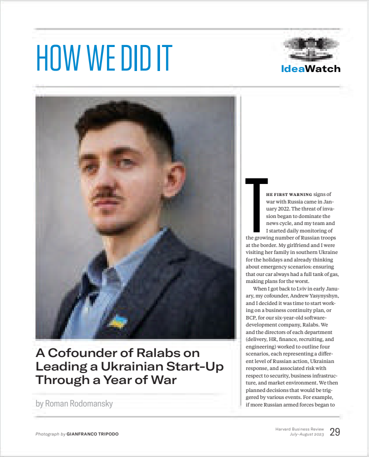
HOW WE DID IT


HOW WE DID IT

IdeaWatch

A Cofounder of Ralabs on Leading a Ukrainian Start-Up Through a Year of War

by Roman Rodomansky

29

A Cofounder of Ralabs on Leading a Ukrainian Start-Up Through a Year of War

Roman Rodomansky | page 29

In early January 2022, as speculation about an impending Russian attack on Ukraine swirled, the leaders of Ralabs, a Lviv-based software-development company, started working on a business continuity plan, or BCP. They outlined various scenarios, each representing a different level of Russian action and Ukrainian response. They monitored the news to better understand the challenges the company and its employees might confront and talked nonstop to customers to gauge their nervousness about doing business in Ukraine.

On February 24, 2022, Russia did invade Ukraine, and the company's advance planning paid off. Its leaders had already relocated some employees, allocated budget for BCP-related activities, developed HR policies for a range of emergency situations, and conducted a number of educational programs to help employees feel prepared, on topics ranging from managing in a crisis to being drafted into the army. As a result, just a few weeks after the invasion Ralabs was back to 90% of typical performance, which has more or less continued if not improved over the past year. The lessons it learned—around the importance of scenario planning, flexibility, decisive decision-making, and managing customers and employees through uncertainty—may be helpful both to other Ukrainian organizations during this war and to leaders around the world faced with navigating any crisis.

HBR Reprint R2304A

MANAGING YOURSELF

Experience

Advice and Inspiration

MANAGING YOURSELF

Why It's So Hard to Ask for Help

And how to get past what's blocking you

by Manfred F.R. Kets de Vries

139

Why It's So Hard to Ask for Help

Manfred F.R. Kets de Vries | page 139

Although human beings are naturally social creatures, ready to both give and accept help, many of us struggle to actually ask for it, which over time can make us miserable and bitter. And because remote work is on the rise, leaving many of us isolated from colleagues, the challenges of asking for help have only intensified. To feel fulfilled and be successful both personally and professionally, it's important to acknowledge and accept when you are working beyond your own capacity and be open to asking others for help. In this article the author, a management scholar and a leadership guru, looks at what drives people's reluctance to seek help and offers strategies for overcoming the barriers.

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SMARTER THAN THE AVERAGE GUIDE
HBR Guide to
Leading Teams
Balance skills and styles
Establish clear roles
Promote healthy dissent
By Mary Shapiro
Harvard Business Review Press

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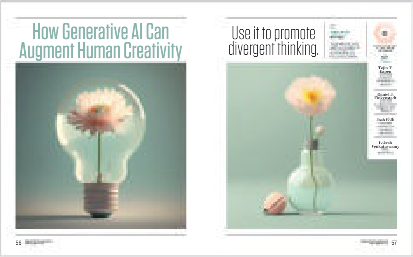
Features

AI & MACHINE LEARNING


How Generative AI Can Augment Human Creativity
Use it to promote divergent thinking.

How Generative AI Can Augment Human Creativity

Tojin T. Eapen et al.
page 56

There is tremendous apprehension about the potential of generative AI—technologies that can create new content such as text, images, and video—to replace people in many jobs. But one of the biggest opportunities generative AI offers is to augment human creativity and overcome the challenges of democratizing innovation.

In the past two decades, companies have used crowdsourcing and idea competitions to involve outsiders in the innovation process. But many businesses have struggled to capitalize on these contributions. They've lacked an efficient way to evaluate the ideas, for instance, or to synthesize different ideas.

Generative AI can help overcome those challenges, the authors say. It can supplement the creativity of employees and customers and help them produce and identify novel ideas—and improve the quality of raw ideas. Specifically, companies can use generative AI to promote divergent thinking, challenge expertise bias, assist in idea evaluation, support idea refinement, and facilitate collaboration among users.

HBR Reprint R2304C

LABOR

The Labor-Savvy Leader
The time has come for management to start working with—rather than against—organized labor. Here's how.

The Labor-Savvy Leader

Roy E. Bahat, Thomas A. Kochan, and Liba Wenig Rubenstein | page 66

For much of the past century, U.S. companies feared that unions would hurt shareholder value and innovation, so they responded to organized labor with one strategy: Fight, at all costs. This was brutally effective. Companies perfected the skill of union busting—so much so that most business leaders now have little experience with organized labor.

But owing to an array of forces, including the pandemic and inflation, the landscape is shifting. Workers today feel less secure in their jobs and more uncertain about the future, and not surprisingly, a growing number of them are organizing. In fact, worker interest in joining a union, and public support of organized labor, is at its highest in decades.

If business leaders stick to their old playbook, they risk permanently disenchanting their workforce and harming their brands. Instead, they must begin to reinvent corporate America's relationship with organized labor, working with, rather than against, unions and other formal and informal structures. Indeed, in the next 20 years, the skill of leading an organized—or organizing—workforce may well become *the* critical leadership skill.

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SUSTAINABLE BUSINESS PRACTICES

The Evolving Role of Chief Sustainability Officers
They once focused on optics and reputation. Today many are interacting with investors and helping set strategy.

The Evolving Role of Chief Sustainability Officers

Robert G. Eccles and Alison Taylor | page 76

The role of the CSO is undergoing a rapid and dramatic transformation. Historically CSOs have acted like stealth PR executives—their primary task was to tell an appealing story about corporate sustainability initiatives to the company's many stakeholders. Now, however, some CSOs have moved away from a role centered on messaging and instead are spearheading the true integration of material ESG (environmental, social, and governance) issues into corporate strategy. This pivotal change requires close collaboration with other members of the senior leadership team and active engagement with investors.

This article argues for four major changes to the CSO role. The CSO should be involved in strategy and capital allocation; be more focused on and realistic about stakeholder interactions; be more fully engaged with investors; and be supported with sufficient resources and expertise throughout the entire organization, including on the board and senior leadership team.

In an ideal world, the authors say, a stand-alone CSO role would become obsolete once companies fully integrate ESG considerations into their corporate strategy and operations. Until that day arrives, however, it is crucial to adapt and evolve the CSO role.

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CYBERSECURITY & DIGITAL PRIVACY

The Ethics of Managing People's Data
The five issues that matter most

The Ethics of Managing People's Data

Michael Segalla and Dominique Rouziès | page 86

Over the past few years the European Union has fined companies more than 1,400 times for a total of nearly €3 billion for violations of the General Data Protection Regulation (GDPR). Almost every week stories appear about how AI-driven decisions result in discrimination against women or minority members in job recruitment, credit approvals, medical diagnoses, or criminal sentencing. These stories are stoking feelings of unease about how data is collected, used, and analyzed. According to the authors, managers who are examining projects that involve gathering human-provided data or leveraging existing databases need to focus on five critical issues: the *provenance* of the data, the *purpose* for which it will be used, how it is to be *protected,* how the *privacy* of the data providers can be ensured, and how the data is *prepared* for use. They begin with a brief overview of the organizational requirements for a robust ethical-review process.

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LEADERSHIP

The Leap to Leader
To succeed as a senior executive, you need more than just special skills and competencies. You need a new mindset.
Adam Bryant
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The Leap to Leader

Adam Bryant | page 96

The author has conducted in-depth interviews with hundreds of CEOs and other executives for the *New York Times* feature "Corner Office" and his leadership series on LinkedIn, and he has coached hundreds of high-potentials. In this article he shares the lessons that emerged about the mental shifts needed to make a successful transition to a senior leadership position. The process involves identifying and communicating your core values and learning how to approach tough decisions. It requires setting the bar for your team's performance and learning to compartmentalize so that you can find the right pace for yourself. And it requires expanding your self-awareness and paying attention to the stories you tell yourself about your experiences—your successes and failures, your bad times and good ones—when you contemplate the arc of your career and life.

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TALENT MANAGEMENT

Disability as a Source of Competitive Advantage
Employing people with disabilities can significantly improve an organization.
Luisa Alemany
Freek Vermeulen
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Disability as a Source of Competitive Advantage

Luisa Alemany and Freek Vermeulen | page 106

Many companies realize the value of diversity, equity, and inclusion. But most focus on gender and ethnicity, paying less attention to people with disabilities.

Employing people with disabilities is usually seen as a social cause—one best suited to nonprofits or the public sector. That is a mistake—and more important, a missed opportunity. In many industries innovative companies are demonstrating that including people with disabilities can lead to real competitive advantage, in four ways: (1) Disabilities often confer unique talents that make people better at particular jobs. (2) The presence of employees with disabilities elevates the culture of the entire organization, making it more collaborative and boosting productivity. (3) A reputation for inclusiveness enhances a firm's value proposition with customers, who become more willing to build long-term relationships with the company. And (4) being recognized as socially responsible gives a firm an edge in the competition for capital and talent.

There is nothing wrong with wanting to do good in the world, but there is also nothing wrong with wanting to do well, and the latter is enough reason to employ people with disabilities.

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TECHNOLOGY & ANALYTICS

What *Smart* Companies Know About *Integrating AI*
Talent and data are just as important as technology.
Silvio Palumbo
David Edelman
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What Smart Companies Know About Integrating AI

Silvio Palumbo and David Edelman | page 116

AI has the power to gather, analyze, and utilize enormous volumes of individual customer data to achieve precision and scale in personalization. The experiences of Mercury Financial, CVS Health, and Starbucks debunk the prevailing notion that extracting value from AI solutions is a technology-building exercise. That thinking holds companies back from capturing the power of AI. They needn't build it; they just have to properly integrate it into a particular business context.

But AI is probably only about 10% of the secret sauce. The other 90% lies in the combination of data, experimentation, and talent that constantly activates and informs the intelligence behind personalization. Personalization is the goal; it's what constitutes a company's strategic brawn. The technology is merely the tool for reaching it. The authors describe what it means to integrate AI tools and what it takes to continually experiment, constantly generate learning, and import fresh data to improve and refine customer journeys.

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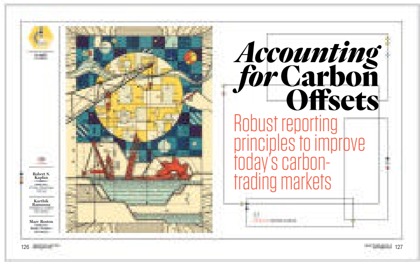
CLIMATE CHANGE



Accounting for Carbon Offsets
Robust reporting principles to improve today's carbon-trading markets
Robert S. Kaplan
Karthik Ramanna
Marc Roston
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Accounting for Carbon Offsets

Robert S. Kaplan, Karthik Ramanna, and Marc Roston
page 126

Markets for carbon trading function poorly, and many traded offsets do not actually perform as promised. Without robust protocols for monitoring offsets and in the absence of proper accounting mechanisms, market-based approaches to reducing atmospheric GHG will be vulnerable to misrepresentation and fraud.

This article presents an accounting framework based on five core principles. The first two define what can and cannot be counted as an offset and what may or may not be traded. The remaining principles set out basic accounting guidelines for offsets. Together they provide the foundation for a well-functioning market that accelerates innovation and deployment of improved offsetting technologies, leading to atmospheric decarbonization.

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Life’s Work

> “I found courage through my teachers. I believed them when they said I had talent. And then that door opened for me.”

Rivera after a performance of Kiss of the Spider Woman *in New York, 1993*

Chita Rivera

Though she started as a “chorus girl,” Rivera stepped into the spotlight as the original Anita in West Side Story, *Velma in* Chicago, *and Aurora in* Kiss of the Spider Woman *on Broadway. Working with musical-theater legends from Leonard Bernstein to Bob Fosse, she racked up 10 Tony Award nominations, won twice, and earned a Lifetime Achievement Award in 2018. She has acted in films and on television, too, but, now 90, she says in her new memoir that she’ll always love live performance best.*

Interview by Alison Beard

HBR: What did your time in the chorus teach you about building camaraderie with coworkers?

RIVERA: There is something so constructive about being in the chorus. It makes you aware of other people and of the entire stage: the front, the middle, the back, the sides. The audience is looking at every single position, and in the chorus you know that. You can’t hide.

After you broke out in *West Side Story*, what changed for you?

I learned great choreography from Jerome Robbins and great music from Leonard Bernstein. We had great lines and lyrics, too, but those two taught me how to tell a story without words. From that moment on I wanted to tell stories, and fortunately I came up at a time when there were great librettists and shows to perform in.

In working with so many Broadway greats, how did you balance respecting their expertise with voicing your own opinions?

You can say a lot quietly. I’ll never forget an instance with Shirley MacLaine when we were filming the movie *Sweet Charity*. She was the star, so Fosse told us that he would use the take that was her best and we needed to make sure that we were perfect every time.

On the last take, which was Shirley’s best, I twisted my body just a bit, and afterward I said under my breath, “Darn it.” Shirley heard me and asked what was wrong. Whispering, I said, “I just didn’t do that right.” Then she went to Fosse and said, “You know, I’d like to do that take over.” And we did, and I corrected the thing I did wrong, and it was perfect.

How did choreographers, directors, producers, and castmates get the best out of you?

My first ballet teacher, Ms. Doris Jones, used to say, “You can always be better,” and that stuck with me. I really did try my best all the time. And I succeeded by listening to and caring about what the director and the choreographer wanted from me. When they say, “That’s right,” you recall exactly what you did and do it again the same way. I’m extremely obedient. It’s my training.

What’s the secret to giving an award-winning performance night after night?

You have to like and care about what you’re doing. If you find yourself bored, that’s not the play’s fault. It’s your fault. It’s two and a half hours, and you never know who’s out there watching you. When I’m onstage, everybody in the audience may be applauding, but if one person is sitting on their hands, that’s who will catch my eye, and I’ll feel I’ve got to win them over. In that moment the performance is your life. It’s your breath. It’s important.

What advice do you have for up-and-comers?

You get so much by being humble. And I don’t care how old you are, you should be constantly learning from the smallest names and the biggest. Every moment could be the one when you drop dead, and every day is the first day of the rest of your life.

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G. Paul Burnett/The New York Times/Redux

FOR MORE FROM CHITA RIVERA, GO TO **HBR.ORG**.

CSC:Miami

Content Supply Chains must be forensic in their detail.

Television broadcasters have long relied on instinct, market knowledge and spreadsheets to forecast TV viewership - but instinct needs to partner with information; market knowledge is never enough; and spreadsheets are no way to excel.

As witness to these challenges, Fractal undertook its own detective work.

By combining AI, data engineering and user-centric design, Fractal created an industry-first TV forecasting system for Europe's leading media and entertainment company. The result? Up to 30% improvement in forecast accuracy.

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